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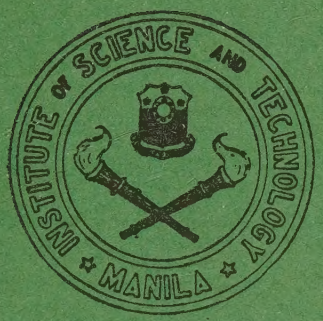

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A TAXONOMIC STUDY ON THE CHRYSOMELIDÆ (INSECTA: COLEOPTERA) FROM FORMOSA PART VIII. SUBFAMILY EUMOLPINÆ

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Kagawa Prefecture, Japan

FOURTEEN TEXT FIGURES

INTRODUCTION

The subfamily Eumolpinæ represents by itself the 11th division of the family Chrysomelidæ (Insecta: Coleoptera) and stands alone from the other 13 subfamilies of the said family by the following combination of characters:

Body variable in shape, generally ovate or oblong, but not rarely more or less shortened or elongated, sometimes cylindrical or subcylindrical, covered with pubescence or scales on the whole surface, or the dorsum glabrous and the other parts pubescent. Head rounded or oblong in the front view, deeply inserted into the prothorax; eyes placed on each side of the head, partly concealed from view in some cases, generally oblong in outline and more or less emarginated at each inner margin; clypeus generally fused with the frons, in other words the clypeus not distinctly limited from frons: antennæ widely separated to each other at their insertions, filiform or subclaviform. Prothorax variable in shape, with the lateral margins distinctly present or evanished. Elytra generally wider at the base than prothorax and they entirely conceal the whole dorsum of abdomen. Ab-

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domen with the intermediate sternites not constricted medially and pygidium not exposed. Legs with the fore-coxæ rounded. Wing-venation: Cu_1 forms two very large cubital-cells (1Cuc and 2Cuc) together with Pcu; Cu_2a very closely approaches at its basal part to M and branch off in two forks at its distal part, the inner one of those forks connects with the 2nd cubital-cell (2Cuc) by a very short cross-vein. Male genitalia (Ædeagus): median lobe well chitinized, with medium foramen very large and occupying the basal half of the lobe; tegmen attached to the median lobe at the anterior edge of median foramen, with the basal part almost entirely dorso-ventrally flattened; internal sac usually longer than the median lobe.

The subfamily Eumolpinæ is one of the large groups of the family Chrysomelidæ. It comprises more than 3,500 known species, described from almost all parts of the world, and is predominantly tropical and subtropical, especially in the tropical American districts. The eumolpines discovered in Formosa and examined by myself to date include 52 species in 21 genera. One genus and 25 species are apparently new and 4 species are hitherto unknown to the Formosan fauna. All materials, including the types will be deposited in the Entomological Museum of the National Taiwan University, Taipei, Formosa (Taiwan). I am indebted to Dr. Bechyné, of the Frey Museum, München, Germany, for presenting me with specimens of *Eumolpus ignitus* (Fabricius) (the genotype of *Eumolpus* Weber), which is used in the present paper to illustrate the main structures of the Dimolpinæ.

Subfamily EUMOLPINÆ

Eumolpides CHAPUIS in Lacordaire, Hist. Nat. Ins.; Gen. Col. 10 (1874) 220.

Eumolpidæ JACOBY, Biol. Centr.-Americana, Col. 1 6 (1881) 195; LEFÈVRE, l'Abeille 14 (1876); Mém. Soc. Roy Sci. Liége (2) 11 (1885) 3; CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 483–528.

Eumolpini WEISE, Naturg. Ins. Deutschlands 1 6 (1882) 276; J. LECONTE et HORN, Classific. Col. N. America (Smiths. Misc. Coll. 26: 507) (1883) 342; BEDEL, Faune Col. Bassin Seine 5 (1891) 107; WICKHMAN, Canadian Ent. 3 28 (1896) 69; l. c. 7 (1896) 171; EVERTS, Col. Neerlandica 2 (1903) 390; HEYNE et TASCHENBERG, Exot. Käf. (1908) 249; REITTER, Fauna Germanica 4 (1912) 103; KUHNT, Illustr. Best.-Tab. Käf. Deutschlands (1913) 804, 834; SCHAUFUSS in Calwer, Käferbuch, ed. 6 2 (1913) 923–924, 1907–

1916; SCHEERPELTZ et WINKLER in Brohmer etc., Tierwelt Mitteleuropas 5 (1930) xii, 223.

Eumolpina FOWLER, Col. British Isls. 4 (1890) 297.

Eumolpinæ JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 280, 283; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 221–231; GRESSITT, Lingnan Sci. Journ. 2–4 20 (1942) 275.

GENERAL CHARACTERS OF THE SUBFAMILY

Body (Fig. 1) ovate or oblong, often more or less shortened or elongate, sometimes cylindrical or nearly so, entirely covered with pubescence or scales, or with dorsum glabrous.

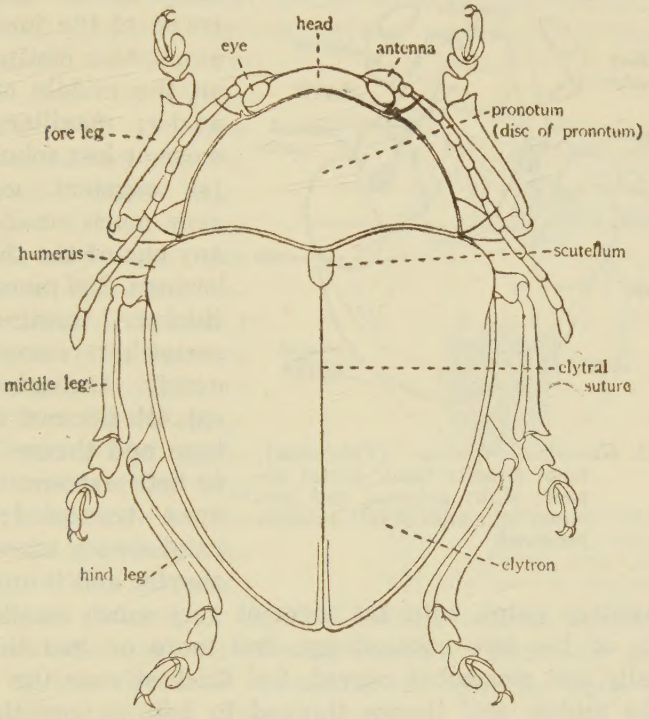


FIG. 1. *Eumolpus ignitus* (Fabricius), from Brazil: dorsal aspect.

Head (Figs. 1, 2, and 3) more or less deeply inserted in prothorax, generally perpendicularly placed to the longitudinal axis of body, often invisible from above, sometimes sulcate or excavate on each side behind the eyes, frequently with a central

longitudinal impression on the frons; clypeus broad, either unlimited or more or less limited from frons, not divided into ante- and post-clypeus, with front margin more or less emarginate at the middle. Mouth-parts (Figs. 2, 3, and 4); labrum transverse-subquadrate, rounded and furnished with some longer pubescence or setæ at the front corners, more or less emarginate and finely pubescent at the front margin, nearly flat or slightly transversely convex on the surface with anterior-marginal area bended downwardly or emarginate-depressed, generally furnished with a transverse row of some setigerous punctures behind the anterior depressed area; mandibles robust, strongly arched inwardly, acuminated at the apex, hollowed at the inner margin, with a distinct tooth on the middle of lower side; maxillary palpi more or less robust, with 1st segment generally very much smaller than any one of the three followings, 2nd more or less thickened terminally and somewhat curved, 3rd nearly truncate-obconical, 4th thickest near the base and thence thinned to both extremities with apex truncated; labial palpi always more or less shorter and thinner than the maxillary palpi, with 1st segment very much smaller than any one of the two succeedings, 2nd more or less thickened terminally and somewhat curved, 3rd thickest near the base or near the middle and thence thinned to both extremities with apex truncated. Eyes placed on each side of the head, partly concealed from view in some cases, generally oblong in outline, with inner margin emarginate or entire and surface moderately convex. Antennæ (Figs. 1 and 2) widely separated at bases by the width of frons, with basal segments more or less sparsely pubescent, terminal segments very thickly so and all the segments mixed with some longer pubescence or setæ respectively;

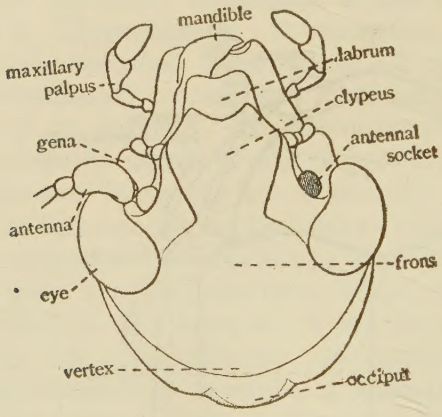


FIG. 2. *Eumolpus ignitus* (Fabricius), from Brazil; head, dorsal aspect; right antenna and terminal segments of left antenna removed.

1st segment always strongly thickened, 2nd generally shortest, 3rd to 6th slender, 7th to 11th nearly equal in thickness to the former, or more or less strongly dilated. Pronotum (Fig. 1) subglobular or truncate-subconical or cylindrical, with sides not margined in some cases, but in many cases sharply ridged. Scutellum (Fig. 1) always distinct, with outline obtrigonate, subquadrate, subpentagonal, semicircular, etc., or their nearly allies. Elytra (Figs. 1 and 5) generally more or less longer than wide, subquadrate or oblong or subcylindrical, generally wider than pronotum with well defined humeri, regularly or confusedly punctate, sometimes transversely rugose on each side behind the humeri, rarely irregularly tuberculate on each side behind the humeri; humeri always more or less distinctly convex; elytral epipleura distinct, narrow posteriorly, without excavations for the reception of legs when in repose. Underside (Fig. 5): prosternum broad or narrow, more or less dilated laterally behind the coxæ and completely connected with pro-epimera, thus the anterior coxal-cavities closed behind; pro-episterna with front margin straight or arched forwardly or emarginate backwardly; mesosternum wider than long or the reverse between the middle-coxæ, generally narrower than the prosternum; metasternum transverse, with a distinct central longitudinal suture; abdomen not constricted medially, generally entirely covered by the elytra at apex, the 1st sternite much longer than any one of the three followings with medio-anterior area produced anterior between the midle-coxœ and without excavations for the reception of legs when in repose as in the members of the subfamily Lamprosominæ, the last sternite more or less longer but narrower than any one of the three precedings. Legs (Figs. 1 and 5) moderate or more or less robust, generally fairly long, neither compressed nor accepted in the excavations on the underside of body when in repose as in the case of the members of the subfamily Lamprosominæ;

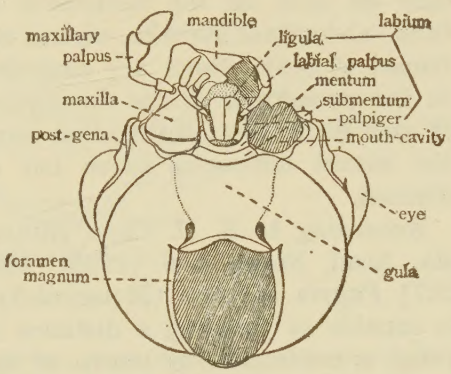
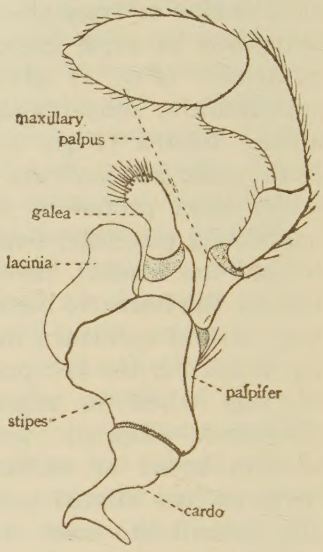


FIG. 3. *Eumolpus ignitus* (Fabricius), from Brazil; head, ventral aspect; antennæ, left mandible and left maxilla removed.

femora fusiform, somewhat constricted near the apex armed a denticle on the underside or unarmed; tibiæ gradually thickened terminally, longitudinally sulcated and ridged, more or less dilated at the apex, unarmed the spur, often with the two hindpairs emarginate on the outer face at or near the apex; tarsi with two basal segments nearly obtrigonate respectively, 3rd deeply bilobed, and these three segments thickly cushioned beneath, claw-segment clubate and somewhat curved; claws simple or appendiculate or bifidate.



4. *Eumolpus ignitus* (Fabricius), from Brazil: left maxilla, ventral aspect.

Secondary sexual characters often may be seen on the structures of tarsi, abdominal sternite, elytra, antennæ, etc., and those are described in the paragraph of the description of each genus, but on the other band the sexual difference often not so distinct.

According to S. H. Chen [Sinensia, Acad. Sinica 3 6 (1935) 226–227] *Pagria signata* (Motschulsky) is capable of jumping a distance of several centimeters. The jump is performed by means of the legs just as the halticine-beetles, but unlike the latter, the present eumolpid-species does not possess any particular internal structure as that of the hind-femora of the flea-beetles. There are several other species which have a similar jumping habit in the present subfamily.

Wings well developed in general. The venation (Fig. 6): Cubital vein well developed—Cu_1 forms distinct 1st cubital-cell (1Cuc) together with Cu_2 and Pcu, and moreover forms very large 2nd cubical cell (2Cuc) by itself; Cu_1a bifurcated, distinctly connected to Cu_1b and subconnected to M with a rather long cross-vein (m-cu).

Male genitalia (*Fig. 7*).—Median lobe strongly chitinized, tubular, more or less curved, with its dorsalside usually more or less strongly sinuate or constricted at or near the anterior part of median foramen; median foramen very large, occupying

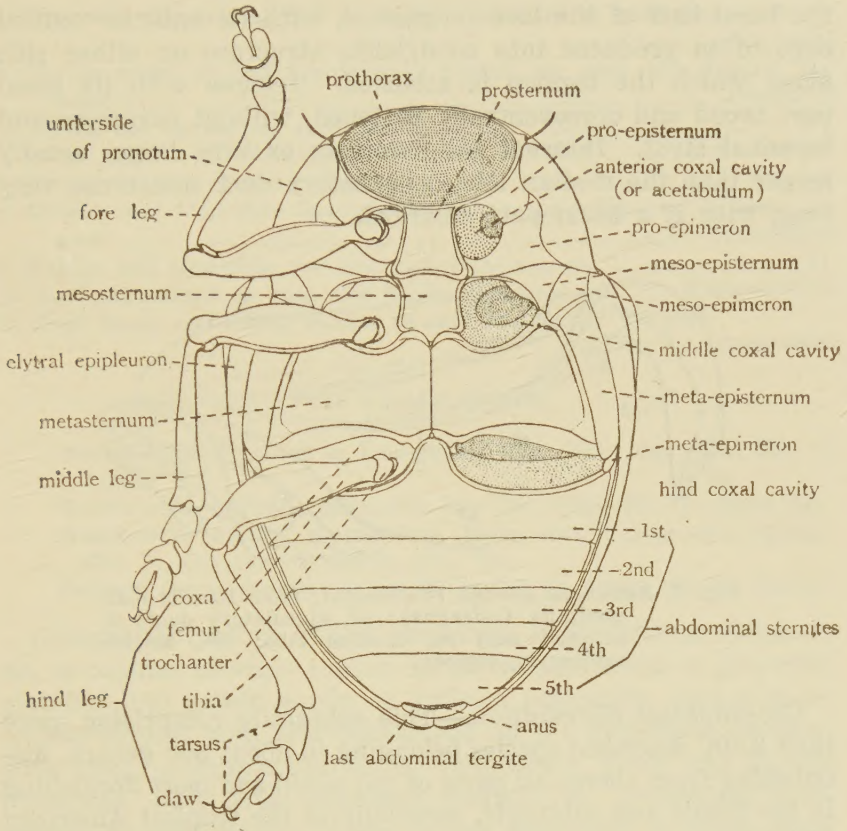


FIG. 5. *Eumolpus ignitus* (Fabricius), from Brazil: ventral aspect, head and left legs removed.

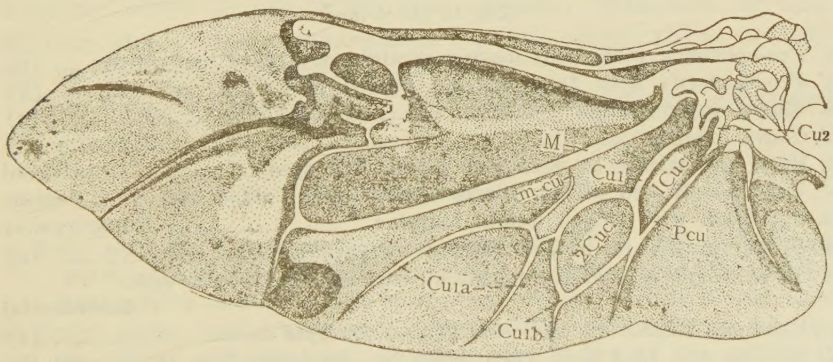


FIG. 6. *Eumolpus ignitus* (Fabricius), from Brazil: left wing, dorsal aspect.

the basal half of the lobe in general, with its anterior-ventral edge often produced into condylelike structure on either side along which the tegmen is attached. Tegmen with its basal part broad and dorsoventrally flattened, without paramere and tegminal strut. Internal sac moderate or very large, usually longer than the median lobe; ejaculatory duct sometimes very long, with it a basal part enlarged.

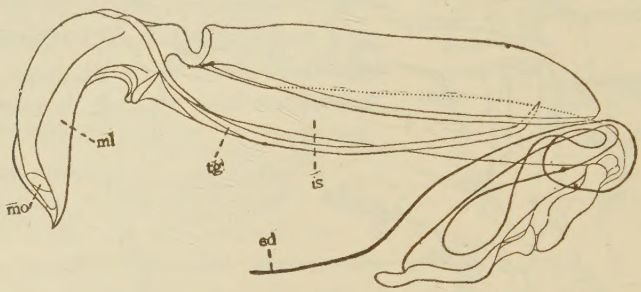


FIG. 7. *Eumolpus ignitus* (Fabricius), from Brazil; male genitalia (ædeagus): *ed*, ejaculatory duct; *is*, internal sac; *ml*, median lobe; *mo*, median orifice; *tg*, tegmen.

Geographical distribution.—This subfamily comprising more than 3,500 described species belonging to about 300 genera, distributing from almost all parts of the world and most flourishing in the tropic and subtropic, especially in the tropical American districts.

The subfamily is divided into 26 tribes, of which the 12 ones, separated as follows, having a relation to our faunistic region:

Key to the tribes

a. Pro-episterna with front margin straight or arched backwardly .... (b)
a'. Pro-episterna with front margin arched forwardly ..... (h)
b. Claws appendiculate ..... (c)
b'. Claws bifidate ..... (d)
c. Head not sulcate on each side behind the eyes ..... **Basileptini**
c'. Head deeply and widely sulcate on each side behind eyes ..... **Pagrini**
d. Pronotum with ridged lateral margins ..... **Metachromini**
d'. Pronotum without ridged margin on each side ..... (e)
e. Head deeply and widely sulcate on each side behind the eyes. **Scelodontini**
e'. Head not sulcate on each side behind the eyes ..... (f)
f. Middle- and hind-tibiæ emarginate on the outer face at or near the apex ..... **Trichochryseini**
f'. Middle- and hind-tibiæ not emarginate as in above ..... (g)
g. Pronotum much narrower than elytra ..... **Lypesthini**

g'. Pronotum transversal, not or slightly narrower at base than elytra. Eumolpini
h. Elytra more or less transversely rugose on each side behind the humeri ..... Edusellini
h'. Elytra not rugose on each side ..... (i)
i. Dorsal surface of body clothed with hairs or scales ..... Myochroini
i'. Dorsal surface of body glabrous ..... (j)
j. Middle- and hind-tibiæ emarginate on the outer face at or near the apex ..... Typophorini
j'. Middle- and hind-tibiæ not emarginate as in above ..... (k)
k. Head not sulcate on each side behind the eyes ..... Endocephalini
k'. Head deeply and widely sulcate on each side behind the eyes. Corynodini

Tribe I. BASILEPTINI

Nodostomites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 261.
Nodostomitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 56.
Nodostomini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 291.
Nodinini CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 486–489 (pars).

General characters.—Body rotundate, ovate, oblong elongate, etc. in outline, strongly convex on the dorsum which is generally glabrous, but rarely partly or entirely pubescent, always more or less clothed with fine pubescence on the underside together with legs. Antennæ filiform or subfiliform, finely and thickly pubescent, with basal segments sparsely so. Pronotum transversal or subquadrate, more or less narrowed in front, with lateral margins frequently angulated or abruptly rounded at or behind the middle or before the base. Prosternum broad. Pro-episterna with front margin straight or arched backwardly. Femora either armed a denticle on each underside or not. Middle- and hind-tibæ emarginate on each outer face at or near the apex. Claws appendiculate.

This group is represented in Formosa by two genera separated as follows:

Key to the genera

a. Body very short, broadly ovate or subrotundate in outline; antennæ short, extending to the basal margin of pronotum when turned them back; elytra as wide at base as of the pronotum.. *Nodina* Motschulsky
a'. Body ovate, subquadrate-ovate, oblong-ovate, oblong, elongate, etc. in outline; antennæ long, extending back to beyond the shoulders; elytra wider at base than of the pronotum ..... *Basilepta* Baly

Genus i. NODINA Motschulsky

Nodina Motschulsky, Etud. Ent. 7 (1858) 108; Baly, Trans. Ent. Soc. London (3) 4 (1867) 259–260; Chapuis in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 262; Lefèvre, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 61; Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 291, 292; Chen, Sinensia, Acad. Sinica 3 6 (1935) 234, 297–299; l. c. 5–6 11 (1940) 488.

Genotype: *Nodina pusilla* Motschulsky, Etud. Ent. 7 (1858) 108–109 from E. India [Fixed by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 292].

Range: Oriental Region; Manchuria Subregion.

General characters.—Body short, ovate or subrotundate, strongly convex and glabrous on the dorsum, finally pubescent on the underside together with antennæ and legs.

Head deeply inserted in prothorax up to the posterior areas of eyes, obliquely or nearly perpendicularly placed to the longitudinal axis of body, with a rather deep sulcus on each side of frons extended back to the hind margin of eye where it is distinctly widened; clypeus broad, transversal, not separated from frons, more or less emarginate at the middle of front margin and angulate on each side of the emargination. Mouthparts: labrum transversal, with front margin gently rounded and finely pubescent, dorsal surface nearly flat or slightly transversely convex on the basal area, more or less depressed in a transverse oblong and pubescent-punctulate on the anterior area; mandibles robust, strongly arched inwardly, acuminate-elongate at the apex followed by a tooth beneath, hollowed on the inner face; maxillary palpi rather slender, with 1st segment extremely smaller than any one of the three followings, 2nd clubate and somewhat curved, 3rd much shorter than the 2nd and slightly thickened terminally, 4th longest, thinned terminally and bluntly pointed at the apex; labial palpi slender, with 1st segment minute, 2nd clubate and somewhat curved, 3rd nearly equal in length to the 2nd, thinned terminally and rather bluntly pointed at the apex. Eyes ovate or rotundate-ovate, distinctly convex, with inner margin slightly arched inwardly. Antennæ rather robust, short, generally hardly extend to the basal margin of pronotum when turned them back, with 1st segment distinctly thickened and more or less emarginate at the outer face, 2nd nearly equal in shape to the 1st or clubate and very much thinner than the 1st in any case, 3rd and 4th very much thinner than the 2nd, 5th to 11th dilated and rather

thickened. Pronotum strongly transversal, narrowed in front; front margin almost immarginated, but narrowly bordered on each side, front angles nearly 90° or rather larger than it and bears a setigerous puncture on each tip, lateral margins sharply ridged and almost straight or rather rounded, basal angles nearly 90° or rather larger than it and bears a setigerous puncture on each tip as in the front angles, basal margin distinctly bordered and markedly arched posteriorly at the middle, dorsum transversely convex, with latero-anterior areas strongly deflexed. Scutellum triangular, subquadrangular, subcircular, semicircular, etc., in outline, flat or slightly convex on the surface. Elytra more or less longer than wide, as wide at base as of the pronotum, rounded on each side, narrowed at behind; dorsum strongly convex, shallowly grooved or depressed along the lateral and apical margins, regularly punctate-striate; humeri elevated, free from the large striated punctures; elytral epipleura broad at the basal area, narrowed posteriorly from the middle and disappeared near the apex. Underside: prosternum broad, somewhat wider than long, widened posteriorly, straight or slightly rounded at the hind margin; pro-episterna trigonate, with front margin straight; mesosternum short, very much wider than long, widened posteriorly, with hind margin generally more or less angularly produced posteriorly at the middle; metasternum short, very much wider than long, with a rather fine central longitudinal suture; abdomen entirely covered by elytra, with apical margin of last sternite more or less emarginate. Legs: femora strongly incrassate medially, somewhat constricted before the apex, unarmed the tooth or spine beneath; tibiæ slender at the base, but rather strongly dilated terminally, variously longitudinally ridged, longitudinally sulcate on the outer unarmed the spur, middle- and hind-tibiæ emarginate on the outer face at or near the apex; tarsi with two basal segments subtrigonate, 3rd deeply bilobed, claw-segment clubate and somewhat curved; claws appendiculate.

Male.—Tarsi, especially the fore or fore and middle pairs, with 1st segment strongly dilated and thickened.

Female.—Elytra with one or more longitudinal costa on each side behind the humeral callus.

Key to the species

1. Dorsal surface deep blue in coloration, front margin of clypeus very widely and deeply emarginate in a /‾\-shape, prosternum longitudinally convex viewed ventrally with only a few large punctures. *issikii* sp. nov.

1'. Dorsal surface not blue in coloration, front margin of clypeus narrowly and shallowly emarginate in a ∧- or ⌒-shape, prosternum flat with many large punctures ..... (2)

2. Dorsal surface greenish æneous in coloration, pronotum and elytra strongly punctured, scutellum transverse subquadrate. ♀: elytra with three very strongly elevated costæ on each side behind the humeral callus ..... *chalcosoma* Baly

2'. Dorsal surface black in coloration, with a cupreous shimmer, pronotum and elytra more weakly punctured than in the preceding species, scutellum subpentagonal. ♀: elytra with two long costæ on each side behind the humeral callus ..... *sauteri* sp. nov.

1. NODINA ISSIKII sp. nov.

Body broadly ovate, strongly convex and glabrous on the dorsum, finely pubescent on the underside together with antennæ and legs. Dorsal surface dark blue, with elytra lighter than pronotum, strongly lustrous; underside black; antennæ, mouthparts and legs pitchy black to black, with 1st antennal segment yellowish brown, 2nd to 5th antennal segments dark yellowish brown, labrum reddish brown together with apices of tibiæ.

Head broad, with a distinct groove on each side of frons as usual, rather sparsely punctured; vertex and frons commonly distinctly convex, with a short longitudinal furrow on the middle of frons; clypeus very broad but very short, not distinctly separated from frons, somewhat depressed along the front margin which is very widely and deeply emarginate in a ⌒-shape and strongly angulate on each side of the emargination; labrum very largely exposed and shaped and structured as described in the generic character; mandibles very large, strongly angulated on the outer face at base. Antennæ comparatively long, extend to the basal area of elytra when turned them back; 1st segment strongly thickened and somewhat emarginate at the outer face, 2nd nearly equal in length to, but very thinner than, the 1st, clubate and somewhat curved, 3rd most slender, very much thinner and shorter than the 2nd and weakly thickened terminally, 4th slightly longer and thicker than the 3rd, from the 5th to 7th the segments distinctly increase their size and 5th rather thicker but shorter than the 2nd, 7th to 9th nearly equal in size to each other, 10th distinctly larger than the 9th, but rather shorter than the 1st, 11th nearly oblong in outline and distinctly longer but flatter than the 1st. Pronotum rather more than twice as wide as it is long, somewhat narrowed in front; front margin immarginated

at the middle and very narrowly bordered on each side, front and basal angles nearly 90° in angulation and bears a setigerous puncture on each tip, lateral margins sharply ridged and rounded, basal margin distinctly bordered and slightly arched forwardly on each side of the middle which is distinctly arched backwardly; dorsum transversely convex, with latero-anterior areas especially strongly deflexed, rather thickly punctate, the punctures on the marginal area more or less finer than those on the median disc. Scutellum subtrigonate, distinctly rounded on each side, slightly convex on the surface with a very faint alutaceous structure and only a few very fine punctures. Elytra somewhat longer than wide, as wide at base as of the pronotum, rounded on each side, convergent to the apical extremity with a gentle curvature; dorsum strongly convex, regularly punctate-striate, the punctures large and deep on the basal area, but become finer posteriorly, interstices of these striæ of punctures bears a row of very fine punctures on each; humeri distinctly elevated, free from the large striated punctures, but very finely and irregularly punctulate. Underside: prosternum much wider than long, widened posteriorly, somewhat constricted on each side, straight at the hind margin, longitudinally convex on the surface viewed ventrally, with only a few large but not deep punctures; pro-episterna with front margin straight. Legs: tibiæ channelled on the outer face, middle- and hind-tibiæ strongly emarginate on the outer face at the apical area; claws appendiculate.

Male.—Elytra with a short and not strongly elevated interstice on each side from the posterior end of humeral callus to a little posteriorly; last abdominal sternite and apical margin weakly emarginate; 1st tarsal segment of the two anterior pairs of legs strongly dilated and thickened.

Length.—♂, 2.3 mm.

Local distribution.—Kahodai-Reimei (altitude about 900 to 2,300 meters) in Mt. Taihei-zan, Taityû-Syû (1♂, **Holotype**, June 4, 1942, S. Issiki leg.).

General distribution.—Formosa.

The present new species is easily distinguished from the other Formosan species by the dorsal surface of body dark or deep blue in coloration, the front margin of clypeus widely and deeply emarginate as in the above description and the prosternum not flat on the surface with only a few large but shallow punctures.

2. NODINA CHALCOSOMA Baly.

Nodina chalcosoma BALY, Trans. Ent. Soc. London (1874) 170 (Japan: Nagasaki; China: Hongkong); GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3374 (Nagasaki); LEWIS, Cat. Col. Japanese Archipel. (1879) 28 (Japan); HEYDEN, Deutsche Ent. Zeitschr. 2 23 (1879) 362 (Japan: Hiogo); JACOBY, Proc. Zool. Soc. London (1885) 753 (Japan); SCHÖNFELDT, Cat. Col. Japan (1887) 147 (Japan: Nagasaki); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 59 (Japan: Nagasaki; China: Hongkong); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1267 (Japan and China); MIWA, Syst. Cat. Formosan Col. (1931) 186 (Formosa: Horisha); CHÛJÔ, Trans. Nat. Hist. Soc. Formosa (136–139) 25 (1935) 78 (Loo-Choo; Iriomote-jima); CHEN, Sinensia, Acad. Sinica 3 6 (1935) 299–300 (Transfer of the original description); CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 142 25 (1935) 210 (Loo-Choo: Iriomote Is.); Bull. Umeno Ent. Lab. 2 (1935) 14 (Japan: Mt. Kikosan in Kyûsyû); YAMAMOTO, Kagaku-no-Nôgyô 4 17 (1937) 122 (Japan: Sado Is.); HO in WU, Cat. Ins. Sinensium (1937) 809 (China: Hongkong); CHÛJÔ, Bull. Umeno Ent. Lab. 6 (1938) 7 (Japan: Mt. Sobosan in Kyûsyû); KONTYU, Ent. Soc. Nippon 2 14 (1940) 76 (Japan: Kodakusa in Koti-Si, Sikoku); NAKANE, Ent. World 96 10 (1942) 78 (*Hodina*) (Japan, near Lake Noziri, Honsyu).

Body broadly ovate, strongly convex and glabrous on the dorsum, finely pubescent on the underside together with antennæ and legs. Dorsal surface greenish bronzy, strongly lustrous; underside black together with coxæ; antennæ, mouthparts and legs (coxæ excepted) yellowish brown to reddish brown, but the terminal segments of antennæ more or less infuscated in many cases.

Head distinctly and rather thickly punctured, strongly grooved on each side of frons, the grooves widened backwardly and extend back to the hind margin of eyes; vertex and frons commonly convex, with a short longitudinal furrow on the middle of frons; clypeus transverse subquadrate, not separated from frons, flat and pubescent-punctulate on the surface, with front margin narrowly emarginate at the middle and angulated one each side of the emargination. Antennæ rather robust, short, hardly extend to the basal margin of pronotum when turned them back; 1st segment distinctly thickened and emarginate at the outer face, 2nd nearly equal in shape to the 1st but very much thinner than it, 3rd smallest and rather widened terminally, 4th rather larger than the 3rd but smaller than the 2nd and gently widened terminally, 5th much wider and thicker than the 4th, from the 5th to 11th the segments gradually increasing their size, 11th subovate and bluntly pointed or

narrowly rounded at the apex. Pronotum more than twice as wide as it is long, narrowed in front; front margin almost immarginated but narrowly bordered on each side, front angles rather larger than 90° in angulation and furnished with a setigerous puncture on each tip, lateral margins somewhat rounded and narrowly but distinctly ridged, basal angles nearly 90° in angulation and furnished with a setigerous puncture on each tip, basal margin distinctly bordered and slightly trisinuate on each side of the middle which is markedly arched posteriorly; dorsum strongly transversely convex, very strongly deflexed at the latero-anterior areas, distinctly and thickly punctured, some punctures on the front corners bears a fine pubescence in each. Scutellum subquadrate, rather wider than long, slightly rounded at the hind corners and also at the hind margin, flat on the surface with a few punctures on the basal area. Elytra somewhat longer than wide, almost as wide at base as of the pronotum, rounded on each side, narrowed at behind; dorsum strongly convex, rather strongly depressed along the lateral and apical margins, regularly punctate-striate, the punctures large and deep on the basal area, but become rather finer posteriorly, interstices of these striæ of the punctures almost flat and very finely but not very thickly punctulate; humeri raised, free from the larger striated punctures, but very finely punctulate as on the interstices of the main area of elytra. Underside; prosternum broad, somewhat wider than long, widened posteriorly, slightly arched posteriorly at the hind margin, flat on the surface with many large and deep punctures; pro-episterna with front margin straight. Legs: tibiæ longitudinally sulcate on the outer face, middle- and hind-tibiæ distinctly emarginate on the outer face at the apex; claws appendiculate.

Male.—Elytra sometimes with an obtuse short costa on each side behind the humerus, but in many cases it is not recognizable as the so-called "costa" but existed as a "convex-interstice"; last abdominal sternite with apical margin widely and rather strongly emarginate; fore- and middle-tarsi with each 1st segment much wider and thicker than the corresponding segment in the female.

Female.—Elytra with three strongly elevated costæ on each side, of which the median one is commenced on the humeral callus and deeply sinuate on the upper edge, but the others occupied the interspace on either side, and these three costæ confluent at the base and run downwards behind the middle

of the disc of elytron, when they suddenly terminate; last abdominal sternite with apical margin narrowly and slightly emarginate.

Length.—♂ ♀, 1.8 to 2.3 mm.

Food-plant.—*Melastoma candidum* Don (Japanese name: *Nobotan*) in Formosa.

Local distribution.—Hori, Nôkô-Gun, Taityû-Syû (1♂ and 1♀, May 10, 1913, I. Nitobe leg.; 1♂, May to August, 1918, H. Kawamura leg.); Sintiku, Sintiku-Syû (2♀ ♀, July 1 to 30, 1918, J. Sonan leg.); Musya, Nôkô-Gun, Taityû-Syû (4♂ ♂ and 1♀, May 18 to June 15, 1919, T. Okuni leg.); Kayahara, Ratô-Gun, Taihoku-Syû (1♂, July 23, 1929, Y. Miwa leg.); Zyûziro, Kagi-Gun, Tainan-Syû (2♀ ♀, April 26, 1931, T. Shiraki leg.); Mt. Sô-zan, Sitisei-Gun, Taihoku-Syû (1♂, April 26, 1932, M. Chûjô leg.); Musya-Miharasi, Nôkô-Gun, Taityû-Syû (1♂ and 1♀, July 20, 1940, K. Endo leg.); Seraoka, Karen-Gun, Karenko-Tyô (1♂, August 15, 1940, M. Chûjô leg.).

Horisha (after Y. Miwa, 1931).

General distribution.—Japan, Loo-Choo, Formosa, and S. China.

3. NODINA SAUTERI sp. nov.

Body broadly ovate, with dorsum strongly convex and glabrous, underside finely pubescent together with antennæ and legs. General color black, with a cupreous shimmer on the dorsum: antennæ, mouth-parts and legs deep yellowish brown to reddish brown, with terminal segments of antennæ slightly infuscated, coxæ black and trochanters piceous to pitchy black.

Head with a distinct groove on each side as usual, distinctly and rather sparsely punctured; vertex and frons commonly convex, with a very short longitudinal furrow on the middle of frons; clypeus rather wider than long, not separated from frons, flat on the surface, with a row of pubescent-punctures nearly along the front margin which is emarginate at the middle and angulated on each side of the emargination. Antennæ short, hardly extend to the basal margin of pronotum when turned them back; 1st segment distinctly thickened and emarginated at the outer face, 2nd nearly equal in shape to the 1st but very much thinner than the latter and much thicker than the 4th, 3rd smallest and slightly widened terminally, 4th nearly equal in shape to the 3rd but rather thicker than the latter, 5th to 11th distinctly dilated and somewhat thickened, strongly

increase their size from the 5th to 7th, 7th to 10th nearly equal in size to each other, 11th much longer than the 10th and bluntly pointed at the apex. Pronotum much more than twice as wide as it is long, strongly convergent in front; front margin almost immarginated but narrowly bordered on each side in a short distance, front angles nearly 90° in angulation and bears a setigerous puncture at each tip, lateral margins sharply ridged, slightly rounded with the anterior one-third strongly convergent forwardly and the basal part also strongly convergent basally in a short distance, basal angles rather larger than 90° in angulation and bears a setigerous puncture on each tip, basal margin distinctly bordered and very slightly trisinuate on each side of the middle which is markedly arched posteriorly; dorsum transversely convex, strongly deflexed at the latero-anterior areas, distinctly and rather thickly punctured. Scutellum subpentagonal, slightly convex on the surface, completely impunctate or with a few very fine punctures on the basal area. Elytra somewhat longer than wide, as wide at base as of the pronotum, rounded on each side, narorwed at behind; dorsum strongly convex, distinctly furrowed along the lateral margins, regularly punctate-striate, the punctures large and deep on the basal area but become very finer posteriorly, interstices of these striæ of punctures almost flat and very finely but not very thickly punctulate; humeri raised, free from the large striated punctures, but finely punctulate. Underside: prosterum very much wider than long, strongly constricted on each side, widened at behind, slightly arched backwardly at the hind margin, flat on the surface with many large and deep punctures; pro-episterna with front margin straight. Legs: tibiæ longitudinally channelled on the outer face, middle- and hind-tibiæ emarginated on the outer face at the apical part; claws appendiculate.

Male.—Elytra with a short and weak elevated interstice on each side below the humeral callus, last abdominal sternite with apical margin more strongly emarginated in the female, fore- and middle-tarsi with 1st segment much wider and thicker than those corresponding segment of the female.

Female.—Elytra with two sharp longitudinal costæ on each side from the posterior end of humeral callus to much beyond the middle of elytron, the inner costa nearly straight, but the outer one distinctly arched at the basal half, interspace of these two costæ shortly and very weakly longitudinally convex on the middle.

Length.—♂ ♀, 1.7 to 1.9 mm.

Local distribution.—Kankau, Kôsyun-Gun, Takao-Syû (1 ♀, Allotype, April, 1912, H. Sauter leg.); Kôsyun, Kôsyun-Gun, Takao-Syû (3 ♂ ♂ and 1 ♀, Paratype, April 25 to May 25, 1918, J. Sonan leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1 ♂, Holotype, April 4, 1940, R. Matuda leg.).

General distribution.—Formosa.

This new species is somewhat allied to *Nodina chalcosoma* Baly, but may be separated from it as shown in the above-mentioned key. The species from Kosempo and Kankau which were determined by myself as *Nodina chalcosoma* Baly in Arb. Morph. Taxon. Ent. Berlin-Dahlem. 1 5 (1938) 28 are identical with the present species.

Genus ii. BASILEPTA Baly

Basilepta Baly, Journ. Ent. 1 (1860) 23; Weise, Tijdschr. v. Ent. 65 (1922) 47; Chen, Sinensia, Acad. Sinica 3 6 (1935) 234, 302–304; l. c. 5–6 11 (1940) 488.

Nodostoma Motschulsky in Schrenck, Reise u. Forsch. Amurlande 2 2 (1860) 176; Baly, Trans. Ent. Soc. London 2 4 (1867) 212; Chapuis in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 261; Lefèvre, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 57; Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 292, 301.

Genotype: *Basilepta longipes* Baly, Ent. Journ. 1 (1860) 23, *pl. i, f. 1* from Borneo [Designated by S. H. Chen, Sinensia, Acad. Sinica 3 6 (1935) 302].

General characters.—Body ovate or subquadrate-ovate in many cases, but sometimes oblong and rarely elongate, strongly convex and generally glabrous on the dorsum, but sometimes the head and pronotum or the head only more or less pubescent, rarely entirely pubescent, always more or less pubescent on the underside together with legs and antennæ (the four or five basal segments sparsely pubescent, but the remainings very thickly so).

Head inserted in prothorax up to or near the hind margin of eyes, obliquely or nearly perpendicularly placed to the longitudinal axis of body; vertex generally more or less convex; frons lightly convex or nearly flat and generally with a central longitudinal sulcus or impressed-line, but sometimes lacking such a impression; clypeus generally confounded with the frons, but rarely raised and delimited behind by a depressed area, shortly lobed forwardly at the anterior marginal area nearly in the width of labrum and more or less emarginate between these

lobes. Mouth-parts: labrum transversal, rounded and finely pubescent at the front margin, flat or slightly transversely convex on the surface, with anterior area more or less depressed or declined; mandibles robust, with outer face nearly rectangularly bended inwardly behind the middle and inner face distinctly excurved and hollowed medially, strongly angulate at the apex followed by another tooth below it; maxillary palpi rather slender to rather robust, with 1st segment extremely shorter and thinner than any one of the three followings, 2nd subclubate and somewhat curved, 3rd much shorter than the 2nd or 4th and rather thickened terminally, 4th elongate, narrowed and subtruncate at the apex; labial palpi generally rather slender, with 1st segment minute, 2nd subclubate and somewhat curved, 3rd strongly elongate, narrowed and subtruncate or bluntly pointed at the apex. Eyes moderate to large in size, oblong to reniform in outline, distinctly convex on the surface, with inner margin more or less emarginate. Antennæ filiform or with terminal segments somewhat dilated, generally longer than half, but shorter than whole, the length of body, but rarely very long and longer than the body. Pronotum transversal, more or less strongly narrowed in front; front margin nearly straight, not bordered, followed by a transverse groove which is parallel to the front margin or somewhat arched and often ridged with a row of distinct punctures, and the groove frequently obsolete at the median part; lateral margins strongly ridged, generally angulated or toothed or abruptly rounded at or behind the middle or immediately in front of the base, sometimes simply rounded; basal margin distinctly bordered, more or less arched posteriorly at the median part; all the angles tuberculate or dentate in general, but sometimes the front angles obsoletely or not prominent, with a puncture on each tip and the puncture bears a long seta; dorsum transversely convex. Scutellum more or less longer than wide and narrowed posteriorly in many cases, rounded or angulated at the apex. Elytra longer than wide, wider than pronotum, narrowed and rounded at the apex; dorsum strongly convex, regularly striate-punctate in many cases, sometimes irregularly so, with lateral marginal areas narrowly reflexed and basal area more or less convex bounded behind by a transverse depression; humeri strongly elevated in general, but rarely not markedly raised, free from the large punctures; elytral epipleura broad at the basal area, distinctly narrowed posteriorly from the middle and

disappeared near the apex, generally flat and impunctate on the surface. Underside: prosternum broad, widened posteriorly, straight or rather arched posteriorly at the hind margin, coarsely punctate and sometimes rugose on the surface; pro-episterna subtrigonate, with front margin straight or arched posteriorly; mesosternum strongly transversal, more or less constricted on each side, emarginate or straight at the hind margin with a small or rather large tuberculation at the middle; metasternum strongly transversal, with a distinct central longitudinal suture and a pair of small tubercle, which is divided by the former central longitudinal suture in two ones, on the middle of anterior area; abdomen entirely covered by elytra or with a part of last tergite exposed beyond the apex of elytra. Legs rather robust, rarely slender; femora generally more or less strongly incrassate in the middle, the fore pair thickest and the middle pair most slender, somewhat constricted before the apex, either armed with a denticle on each underside or not; tibiæ thickened terminally, longitudinally ridged and channelled, unarmed the spur at each apex, the middle and hind pairs emarginate on each outer face at the apical part, often more deeply so on the middle ones; tarsi with two basal segments subtrigonate, 3rd segment deeply bilobed, claw-segment clubate and somewhat curved; claws appendiculate.

The sexual differences found in the members belonging to the present genus are generally not so remarkable, but often the male with the 1st tarsal segment of the two anterior pairs of legs (especially the fore-legs) more or less strongly dilated than those corresponding segments of the female, the post-humeral costæ, when well remarkable, weaker than in the female and generally the number of it is only one on each side, but two in the female, the antennæ longer than those of the female, the pronotum and pro- and mesosternum narrower than those of the female, and the apical margin of last sternite nearly straight, but in the female it is gently emarginate. In the males of *B. cornutum* Chûjô, sp. nov. with a hornlike projection on each anterior corner of the clypeus, of *B. sublaterale* (Clavareau) with pronotum more finely and sparsely punctulate than in the female, and of *B. hirayamai* Chûjô with abdomen longitudinally excavated and very thickly clothed with long pubescence on each side of the excavation.

Key to the species

1. Head and pronotum distinctly pubescent; middle-tibiæ strongly notched at each apex as usual, but the hind-tibiæ not distinctly emarginate;

in the male, clypeus with a large hornlike projection on each side of the front margin; general color yellowish brown; length: 4.5 to 5.0 mm ..... *cornutum* sp. nov.

1'. Head and pronotum, especially the latter, glabrous; hind tibiæ; distinctly notched at each apex as like as in the middle-tibiæ; clypeus similarly structured in both sexes, without such a projection in the male as in above ..... (2)

2. Femora unarmed the denticle on each underside; ground color reddish brown or brownish red, but the dorsum strongly tinged with dark greenish bronzy and moreover with a strong brassy shimmer, the underside also nearly entirely or partly tinged with dark greenish bronzy; mouth-parts reddish brown or brownish red, with apices of mandibles often more or less infuscated; antennæ and legs yellowish brown; length: 2.5 to 3.0 mm ..... *æheomicans* sp. nov.

2'. Femora armed with a denticle on each underside near or beyond the middle ..... (3)

3. Disc of pronotum either impunctate or very finely and sparsely punctulate ..... (4)

3'. Disc of pronotum distinctly punctured ..... (6)

4. Body subovate or oblong-ovate, 3.00 to 3.25 mm (♂) or 3.5 to 4.0 mm (♀) in length, pronotum about two and a half times as wide as it is long; coloration variable, but without such a form as in the following species ..... *davidi* (Lefèvre)

4'. Body very broadly ovate or subquadrate-oblong, 4.0 to 4.3 mm (♂) or 4.5 to 5.0 mm (♀) in length, pronotum about three times as wide as it is long; general color brownish red, with mandibles piceous to black, terminal segments of antennæ more or less infuscated, apices of femora black, tibiæ and tarsi sometimes stained with black in various degrees ..... (5)

5. Each elytron with a black stripe, which is not touched to the basal margin and interrupted at the post-basilar transverse depression, on the middle from the base to a little behind the middle.
sauteri Chûjô

5'. Elytra immaculate, without such a stripe as in above.
sauteri Chûjô var. *unicoloripenne* Chûjô

6. Pronotum about three times as wide as it is long, widest in front of the base ..... (7)

6'. Pronotum not more than two and a half times as wide as it is long, widest at just or a little behind the middle ..... (12)

7. Pronotum distinctly angulated on each side of the widest area.... (8)

7'. Pronotum abruptly rounded or obsolutely rounded on each side of the widest area ..... (9)

8. General color yellowish brown to reddish brown; head often with a a shade of greenish bronzy, mandibles and terminal segments of antennæ more or less infuscated, pronotum generally stained with rather light greenish bronzy excepted the marginal area, elytra with median disc deep greenish bronzy from the base to a little before the apex and latero-marginal areas also deep greenish bronzy, underside more or less with a shade of greenish bronzy; length 3.0 to 4.0 mm ..... *sublateral* (Clavareau)

8'. Metallic coloration in the above mentioned form completely disappeared and represented by the yellowish brown or reddish

brown colorations, but in some cases the metallic dark coloration only remaining on the basal parts of sutural and lateral margins. *sublateral* (Clavareau) var. *immaculatipenne* Chûjô

9. Elytra black ..... (10)

9'. Elytra light or dark greenish bronzy, with brassy shimmer ..... (11)

10. General color black; head and pronotum, together with the latero-ventral areas of the latter, reddish brown or brownish red to rather dark red; antennæ black, with four basal segments yellowish brown to reddish brown and the apical part of the 4th segment more or less infuscated; mandibles partly or entirely piceous to black; maxillary palpi with apical segment more or less infuscated; claws, together with apex of the claw-segment of tarsi, light to dark yellowish brown; length: 4.0 to 5.25 mm. ..... *ruficolle* (Jacoby)

10'. General color black, with labrum, palpi and median area of vertex reddish brown, and front margin of pronotum very narrowly yellowish brown ..... *ruficolle* (Jacoby) var. *melanicolle* Chûjô

11. General color reddish brown or brownish red, with elytra metallic as mentioned in above; terminal segments of antennæ, mandibles and tarsi (excepted the claws) more or less infuscated; length: 45 to 5.5 mm. ..... *elegans* sp. nov.

11'. General color black; with elytra metallic as mentioned in above; antennæ and mouth-parts generally similarly colored as those of the original species, but rather darker or deeper; anterior and lateral marginal areas of head, anterior marginal area of pronotum and knees dark reddish brown, tibiæ piceous and claws yellowish brown ..... *elegans* var. *melanurum* nov.

12. Dorsal surface metallic in coloration ..... (13)

12'. Dorsal surface not metallic in coloration ..... (14)

13. General color brassy or golden green, brassy or golden blue-green, violaceous blue, violaceous blue with elytra greenish blue, etc.; pro- and mesosternum, abdomen and tibiæ black, sometimes piceous, sometimes with a slight bluish or greenish shimmer; antennæ blackish brown to black, with four basal segments yellowish brown, but the fore face of the 1st segment and the terminal part of the 4th more or less infuscated; labrum light to dark reddish brown, mandibles pitchy red to piceous or black, palpi light yellowish brown; tarsi dark reddish brown to blackish, with claws always light or dark yellowish brown; length: 4.5 to 5.5 mm. *giganteum* Chûjô

13'. Dorsal surface of the body cupreous, with head and sides of pronotum and elytra greenish; underside and legs black, partly bear a cupreous or greenish shimmer; the structural differences between the original species and this subspecies having closely been described in the text ..... *giganteum* Chûjô subsp. *cuprarium* Chûjô

14. Latero-ventral areas of pronotum either impunctate or with some punctures on each basal area ..... (15)

14'. Latero-ventral areas of pronotum strongly punctured on the whole surface ..... (16)

15. Body smaller, 2.5 to 3.0 mm (♂) or 3.0 to 3.5 mm (♀) in length, pronotum about one and a half times as wide as it is long; general

color light to deep yellowish brown, with mandibles dark reddish brown or piceous and terminal segments of antennæ somewhat infuscated ..... *hirayamai* Chûjô

15′. Body larger, 3.75 mm (♀) in length, pronotum about twice as wide as it is long; general color yellowish brown, with mandibles pitchy red, seven terminal segments of antennæ infuscated and marginal areas of each elytron (excepted the latero-apical part) distinctly deep black ..... *issikii* sp. nov.

16. Pronotum rather narrower than twice as wide as it is long, with dorsum and latero-ventral areas rather sparsely punctate, and the widest part neither abruptly rounded nor angulated on each side; general color reddish brown, with elytra black, but the humeral calli dark reddish brown and the apical area rather light reddish brown or yellowish brown ..... *consimile* sp. nov.

16′. Pronotum about twice as wide as it is long, with dorsum and latero-ventral areas more or less thickly punctate, and the widest part neither abruptly rounded or angulated on each side; without such a combination of color as in above ..... (17)

17. Head, prothorax and mesosternum dark reddish or brownish red, elytra and abdomen black, metasternum black and generally bordered with reddish coloration, antennæ piceous to black with basal segments yellowish brown, legs black and partly stained with dark reddish coloration; length: 4.0 to 4.5 mm ..... *bicoloratum* sp. nov.

17′. No such combination of colorations ..... (18)

18. Each elytron with one (♂) or two (♀) distinct costæ on each side behind the humeral callus and separated from the latter by a very deep impression, pronoutm with dorsum more strongly and thickly punctured than in the next species; coloration variable: in some cases almost entirely yellowish brown or reddish brown and in other cases almost entirely black, but in many cases partly reddish brown or yellowish brown and partly piceous or black; length: 2.75 to 4.25 mm ..... *varians* sp. nov.

18′. Each elytron with an obtuse costa on each side behind the humeral callus in both sexes and more strongly punctured on the disc (especially on the post-median area) than in the preceding species; general color yellowish brown to reddish brown, generally with mandibles, terminal segments of antennæ, apical parts of femora, tibiæ and tarsi infuscated in various degrees and often deep black, but on the contrary these infuscated areas not infuscated (excepted the mandibles) in some cases; length: 3.25 to 4.00 mm.

taiwanum sp. nov.

4. BASILEPTA CORNUTUM sp. nov.

Body oblong, subelongate; dorsum convex, with head and pronotum rather thickly or sparsely pubescent, scutellum and elytra almost glabrous; underside finely and thickly pubescent together with legs. General color yellowish brown, somewhat lustrous; apices of mandibles, apical segments of palpi and terminal segments of antennæ more or less infuscated.

Head with a distinct groove on each side surrounds the upper half of eye, strongly and rather thickly or sparsely punctate, interspaces of these punctures extremely finely but sparsely punctulate and more or less rugose or not; vertex distinctly convex; frons lightly convex, with a central longitudinal sulcus or impressed-line which is often interrupted on its midway; clypeus not separated from frons, nearly flat or slightly depressed on the surface, strongly ridged on each side, widely emarginate at the front margin and with a very distinct sexual character on each side of this emargination. Antennæ filiform, somewhat longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd subclubate and rather curved, 3rd thinnest, 4th slightly thicker than the 3rd but rather thinner than the 2nd, 5th to 11th somewhat thickened, each one of them distinctly thicker then the 2nd but much thinner than the 1st, 6th rather thicker than the 5th but thinner than the 7th, 7th to 10th nearly equal in thickness to each other and 11th rather thicker than the 10th with apex pointed, the rough order of the length of these segments are as follows: 11>1>4>5>6>7>8>9>10>2>3, but the difference of the length between each neighboring two segments in the former order is slight. Pronotum rather narrower than, or nearly, twice as wide as it is long, obtusely or distinctly angulate on each side at a little behind the middle, thence rather strongly narrowed towards anterior and posterior extremities, gently sinuously in front and obliquely straight behind; front margin nearly straight and immarginated, front angles dentate and bears a setigerous puncture on each tip, lateral margins sharply ridged, basal angles tuberculate and bears a setigerous puncture on each apex, basal margin distinctly bordered and gently arched backwardly at the median part; dorsum transversely convex, strongly and rather thickly or sparsely punctate, with a distinct punctured groove on each side nearly along the front margin. Scutellum nearly linguiform, much longer than wide, somewhat narrowed posteriorly, more or less rounded at the apex, very lightly convex on the surface, with a few fine pubescent-punctures. Elytra elongate, somewhat wider than long, narrowed and rounded at the apex, finely but sparsely pubescent at the apical margin; dorsum convex, with a distinct longitudinal depression on each side just behind the humeral area and touches to the lateral margin, regularly striate-punctate, the punctures become rather finer posteriorly,

interstices of these striæ of punctures very finely but not thickly punctulate under a strong lens; basilar area separately lightly convex within the humeral callus, bounded on each side by a depressed punctured stria and also at behind by a shallow transverse depression, the striated punctures on this area rather finer; humeral callus strongly elevated, free from the distinct striated punctures, but rather thickly covered by microscopically fine punctures. Underside: prosternum much longer than wide, strongly widened behind the fore-coxæ, nearly straight at the hind margin, longitudinally convex on the surface viewed ventrally and very coarsely punctate; pro-episterna with front margin nearly straight or very slightly emarginate; latero-ventral areas of pronotum strongly punctured. Legs: femora armed with a denticle on each underside more (middle- and hind-femora) or less (fore-femora)beyond the middle; middle-tibiæ distinctly emarginate on each outer face at the apical part, but the hind-tibiæ very weakly or obtusely emarginate at this part; claws appendiculate.

Male.—Clypeus with each latero-anterior area very strongly developed forwardly and also upwardly like a very large and reflexed horn, antennæ rather longer than those of the female, pronotum rather narrower than twice as wide as it is long, prosternum very narrower than of the female, last abdominal sternite with apical margin nearly straight and slightly notched at the middle, 1st tarsal segment of the two anterior pairs of legs distinctly dilated and thickened.

Female.—Clypeus with latero-anterior area simply angulate forwardly on each side of the emargination of front margin as usual, pronotum nearly twice as wide as it is long, last abdominal sternite with apical margin widely but very gently emarginate.

Length.— ♂, 4.50 to 4.75 mm; ♀, 4.5 to 5.0 mm.

Local distribution.—Mt. Ari-san (altitude about 2,280 meters), Tainan-Syû (1 ♂, **Holotype**; 1 ♀, **Allotype**; and 1 ♀, **Paratype**, May 25, 1933, M. Chûjô leg.); Miharasi (altitude about 1,800 meters) in Mt. Taihei-zan, Taihoku-Syû (1 ♂, **Paratype**, July 19, 1940, M. Chûjô leg.).

General distribution.—Formosa.

The present new species is unique in having the peculiar secondary male character on the head and the hind-tibiæ not distinctly emarginate on each outer face at the apical part, together with the head and pronotum distinctly pubescent.

5. BASILEPTA ÆNEOMICANS sp. nov.

Body nearly ovate, strongly convex and glabrous on the dorsum, finely but not very thickly pubescent on the underside together with legs. Ground color reddish brown or brownish red, but the dorsal surface very strongly tinged with dark greenish bronzy and with a strong brassy shimmer, and the underside also more or less tinged with dark greenish bronzy, the metallic coloration generally stronger on the metasternum and weaker on the abdomen, the latter with posterior area generally not affected by the metallic coloration, sometimes the whole surface of the abdomen almost or completely free from the metallic coloration; antennæ and legs simply yellowish brown, mouth-parts similarly colored with the ground color, but the apices of mandibles often more or less infuscated.

Head with an oblique groove on each side of frons, the groove extended back to the hind margin of eye and also developed anteriorly to the lateral areas of clypeus, finely shagreened throughout and coarsely punctate, the punctures much smaller on the middle of frons than on the others; vertex distinctly convex; frons lightly convex, with a distinct central longitudinal sulcus; clypeus not separated from frons, nearly flat on the surface with anterior area somewhat depressed, distinctly emarginate at the middle of front margin and somewhat angulate on each side of the emargination. Antennæ slender, filiform, distinctly longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd subclubate, very much thinner than the 1st and rather curved, 3rd most slender, 4th slightly thicker than the 3rd but very much thinner than any one of the others, 5th much thicker than the 4th but rather thinner than the 2nd or 6th, 6th to 10th nearly equally thickened to one another and each one of them rather thicker than the 2nd but thinner than the 11th, the latter much thinner than the 1st and pointed at the apex, the rough order of the length of these segments are as follows: 5>4>1>11>2>6>7>8>9>10>3, and the difference of the length between each neighboring two in the former order is very slight. Pronotum about, or more than, twice as wide as it is long, widest at only a little behind the middle and this area very abruptly rounded on each side, thence strongly narrowed anteriorly and also posteriorly; front margin nearly straight and immarginated, front angles obtusely dentate and bears a setigerous puncture on each tip, lateral

margins sharply bordered, basal angles tuberculate and bears a setigerous puncture on each apex, basal margin distinctly bordered and comparatively strongly arched backwardly at the middle; dorsum transversely convex, strongly and rather thickly or sparsely punctured with their interspaces impunctate on the middle but finely punctulate on each side, the latter often without large punctures excepted on the basal area and also in the groove closely along the lateral margin, with a distinct punctured groove rather closely along the front margin on each side of the middle. Scutellum nearly obtrigonate with apex rounded or nearly linguiform narrowed posteriorly, very lightly convex on the dorsum which is microscopically finely but not thickly punctulate. Elytra subquadrate, rather longer than wide, narrowed and rounded at the apex; dorsum convex, with a weak transverse depression behind the basilar area which is lightly convex and limited from the humeral callus by a longitudinal punctured stria, the former transverse depression not extended to the sutural area but hardly reached beyond the post-humeral area and there it is represented by an elongate strong depression touched to the lateral margin, regularly striate-punctate, the punctures rather large and deep on the basal area, but become very finer posteriorly, interstices of these striæ of punctures almost flat and bears a rather regular longitudinal row of very fine punctures on each, but weakly convex in an oblique and gently sinuate costa on each side behind the humeral callus, the latter distinctly convex and free from the large striated punctures, but microscopically finely and sparsely punctulate. Underside: prosternum nearly trapezoidal, distinctly widened posteriorly, slightly sinuate at the hind margin, coarsely punctate on the surface; pro-episterna impunctate, with front margin nearly straight; latero-ventral areas of pronotum with a few punctures on the basal area. Legs: femora unarmed the denticle on each underside; middle- and hind-tibiæ emarginate on each outer face at the apical area; claws appendiculate.

Male.—Antennæ longer, pronotum about two and a half times as wide as it is long, prosternum narrower, abdomen with last sternite not emarginate at the apical margin, fore- and middle-tarsi with 1st segment rather more dilated and thickened.

Female.—Pronotum more than twice as wide as it is long, abdomen with last sternite very gently emarginate at the apical margin.

Length.— ♂, 2.5 mm; ♀, 2.75 to 3.00 mm.

Local distribution.—Mt. Ari-san (altitude about 2,270 meters), Tainan-Syû (2 ♀ ♀, **Paratype**, October 2 to 23, 1918, J. Sonan leg.; 1 ♂, **Holotype**; and 1 ♀, **Allotype**; October 25, 1935, M. Chûjô leg.); Seto, Tikutô-Gun, Sintiku-Syû (1 ♀, **Paratype**, July 21, 1935, M. Chûjô leg.).

General distribution.—Formosa.

The present new species is somewhat allied to *Basilepta chalceum* (Jacoby) from Assam, but differs from it by the pronotum more than twice as wide as it is long, not toothed on each side behind the middle and the anterior punctured groove not entire, the 4th segment of antenna distinctly longer than the 3rd, and the elytra without two acutely raised costæ behind each shoulder.

6. BASILEPTA DAVIDI (Lefèvre).

Nodostoma davidi LEFÈVRE, Ann. Soc. Ent. France (5) 7 (1877) 157–158 (China: Kiang-si); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 51 (China: Kiang-si); WINKLER, Cat. Col. Reg. Palæarcticæ 2 (1930) 1266 (China).

Basilepta davidi MIWA, Syst. Cat. Formosan Col. (1931) 187 (Formosa: Musha and Horisha); CHEN, Sinensia, Acad. Sinica 3 6 (1935) 304, 306–307 (China: Kiang-si, Chusan in Chekiang, and Gan Chouen in Kweichow).

Nodostoma davidi HO in Wu, Cat. Ins. Sinensium 3 (1937) 806 (China: Kiang-si, Chusan and Gan Chouen Fou in Kweichow).

Nodostoma okinawense CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 136–139 25 (1935) 77–78 (Loo-Choo: Naha); l. c. 142 25 (1935) 210 (Loo-Choo: Okinawa Is.).

Nodostoma insulanum CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 142 25 (1935) 204, 210 (Loo-Choo: Ishigaki-jima).

Body subovate or oblong-ovate, strongly convex and glabrous on the dorsum, finely but not very thickly pubescent on the underside together with legs. Coloration variable, always lustrous and the following six general color-forms may be seen: (*1*) Head, pronotum, scutellum, pro-episterna, pro-epimera and legs red or red-brown; elytra piceous to deep black; underside rufo-piceous to deep black, together with the entire surface or a part of the middle- and hind-coxæ (The named-form). (*2*) Pronotum, pro-epimera and pro-episterna partly or entirely piceous to black; scutellum deep black; head and femora often more or less infuscated; the other areas similarly colored as the preceding form. (*3*) General color deep black, with head partly piceous or dark reddish. (*4*) General color yellowish

brown, with elytra entirely black. (*5*) Dorsal surface and legs yellowish brown, underside piceous to black, together with entire surface or a part of the coxæ, sometimes the median disc of pronotum, scutellum, sutural and lateral margins of elytra more or less infuscated separately or in various combinations (*okinawense*-form). (*6*) Entirely yellowish brown (*insulanum*-form). Commonly in the above mentioned six-forms, the terminal segments of antennæ and mandibles more or less infuscated, basal segments of antennæ, labrum and palpi yellowish brown.

Head with a short or rather long oblique groove on each side of the frons, extended back to the hind margin of eyes, rather sparsely punctured, the punctuation stronger on the vertex and clypeus than on the frons; vertex distinctly convex; frons very lightly convex, with a short central longitudinal sulcus on the anterior area, the sulcus sometimes very shortened and assumes an elongate punctiform; clypeus not separated from frons, flat with anterior area more or less depressed, rather strongly emarginated at the front margin and strongly lobed forwardly on each side of the emargination. Antennæ filiform, more or less longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd nearly clubate or elongate-oblong and somewhat curved, 3rd most slender, 4th slightly thicker than the 3rd and thinner than the 2nd, 5th to 11th somewhat dilated, 5th rather thinner than the 6th, 6th to 10th nearly equal in thickness to one another and each one of them rather thicker than the 2nd, 11th rather thicker than the 10th but thinner than the 1st and pointed at the apex, the length of these segments are rather variable, but the 2nd always shortest, each one of the 8th to 10th longer than the 2nd but shorter than each one of the others, and 5th or 4th often longest. Pronotum about two and a half times as wide as it is long, strongly narrowed anteriorly and also posteriorly from a little before the basal end; front margin nearly straight and immarginated, all the angles more or less prominent and bears a setigerous puncture on each tip, lateral margins distinctly ridged, basal margin strongly bordered and very gently arched backwardly at the median part; dorsum transversely convex, finely but very sparsely punctured, the punctuation nearly or completely obsolete on the lateral areas, with a row of punctures along a little behind the front margin, the row distinctly grooved on each

side but very weakened at the middle, the narrow area between the front margin and the above mentioned transverse row of punctures impunctate. Scutellum narrowed posteriorly with a distinct curvature on each side, narrowly rounded at the apex, very lightly convex on the dorsum, nearly impunctate or with some fine pubescent-punctures. Elytra elongate-subquadrate, narrowed and rounded at the apex; dorsum strongly convex, with separately raised basilar area which is bounded from behind by a distinct transverse depression and also from the humeral callus by a deep longitudinal punctured groove, and a distinct longitudinal depression on each side at just behind the humeral region touched generally very small and shallowly impressed, but large and deep on the marginal area and also in the post-basilar transverse depression, interstices of these striæ of punctures with a longitudinal row of very fine punctures on each under a strong lens; humeri strongly raised, free from the large punctures, but with some microscopically fine punctures. Underside: prosternum rather longer than wide, widened posteriorly, slightly arched posteriorly at the hind margin, coarsely punctate on the surface; pro-episterna with front margin slightly emarginate; latero-ventral areas of pronotum impunctate. Legs: femora armed with a denticle on each underside near (fore-femora) or much beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ emarginated on each outer face at the apical part; claws appendiculate.

Male.—Antennæ longer, pro- and mesosternum narrower, last abdominal sternite with apical margin widely straight.

Female.—Last abdominal sternite with apical margin narrowly emarginate.

Length.— ♂, 3.00 to 3.25 mm; ♀, 3.5 to 4.0 mm.

Local distribution.—Hokutô, Sitisei-Gun, Taihoku-Syû (1 ♀, April 4, 1908, T. Shiraki leg.); Taihoku-Si, Taihoku-Syû (2 ♀ ♀, April 13, 1908, T. Shiraki leg.; 1 ♀, June, 1925, J. Sonan leg.; 1 ♀, May 25, 1934, M. Chûjô leg.; 1 ♂, May 1, 1937, M. Chûjô leg.); Heirinbi, Bunzan-Gun, Taihoku-Syû (1 ♀, April 26, 1908, T. Shiraki leg.); Kanetowan, Niitaka-Gun, Taityû-Syû (1 ♂, April 15, 1910, I. Nitobe leg.); Tauran, Karen-Gun, Karenkô-Tyô (1 ♀, April 23, 1910, I. Nitobe leg.); Hori, Nôko-Gun, Taityû-Syû (1 ♀, May 10, 1913, M. Maki leg.); Kôsyun, Kôsyun–Gun, Takao–Syû (1 ♀, April 25 to May 25, 1918, J. Sonan leg.; 1 ♀, April 4, 1940, R. Matuda leg.); Musya, Nôkô-Gun, Taityû-Syû (7 ♂ ♂ and 9 ♀ ♀, May 18 to June 15, 1919,

T. Okuni leg.) ; Kusukusu, Kôsyun-Gun, Takao-Syû (1 ♀, March 25, 1926, S. Issiki leg.) ; Rimogan, Bunzan-Gun, Taihoku-Syû (1 ♀, May 12, 1933, M. Chûjô leg.) ; Takeya, near Hori, Nôkô-Gun, Taityû-Syû (1 ♂, July 8, 1940, M. Chûjô leg.).

Musha and Horisha (after Y. Miwa, 1931).

General distribution.—China, Loo-Choo, and Formosa.

7. BASILEPTA SAUTERI Chûjô.

Basilepta sauteri CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 26–27 (Formosa: Kankau in Koshun-Distr., Taihoku, and Kuraru).

Body very broadly ovate or subquadrate-oblong, with dorsum strongly convex and glaborus. General color brownish red, strongly lustrous; mandibles piceous to black, terminal segments of antennæ more or less infuscated, each elytron with a black stripe on the middle from the base to a litlte behind the middle, the stripe not completely touched to the basal margin and interrupted at the post-basilar part which is distinctly depressed, apices of femora black, sometimes tibiæ and tarsi strained with piceous or black in various degrees.

Head with a short and distinct groove extended back to the hind margin of eye on each side of frons, extremely finely and faintly punctulate; vertex convex, shallowly punctured; frons lightly convex, without distinct punctures on the median area, but distinctly pubescent-punctate on the marginal area, with a short central longitudinal sulcus which is often longitudinal punctiform on the anterior area; clypeus not distinctly separated from frons, lightly convex on the surface, but the anterior area rather depressed, distinctly and rather sparsely pubescent-punctate, with front margin gently emarginate at the middle in the width of labrum. Antennæ filiform, much longer than half, but rather shorter than whole, the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd rather clubate, somewhat curved and much thinner than the 1st but more or less thicker than any one of the nine followings, 3rd most slender, 4th slightly thicker than, or nearly equal in thickness to, the preceding segment and rather thicker than the 5th, 5th to 11th nearly equal in thickness to each other, with apex of the 11th pointed, the rough order of the length of these segments are as follows: 5≒4≒3≒6> 7>1>11>8>9>10>2. Pronotum about thrice as wide as it is long, strongly narrowed anteriorly, distinctly angulated on

each side before the base; front margin nearly straight and immarginated, all the angles distinctly tuberculate laterally and bears a setigerous puncture on each tip, lateral margins sharply ridged, basal margin distinctly bordered and straight or very slightly arched forwardly on each side of the median part which is somewhat arched backwardly; dorsum transversely convex, impunctate and smooth in one glance, but very finely and rather sparsely punctulate under a high power lens, with a distinct punctured groove along a little behind the front margin and impunctate between this groove and front margin. Scutellum subtrigonate, widely and gently rounded at the apex, slightly convex on the surface and very finely but not very thickly punctulate under a strong lens. Elytra subquadrate, somewhat longer than wide, gently rounded on each side at a little behind the base and then gradually narrowed posteriorly, widely rounded at the apex; dorsum strongly convex, basilar area especially distinctly convex, bounded at behind by a strong transverse depression and also separated from the humeral callus by a deep longitudinal punctured groove, strongly and regularly punctate-striate, but these striæ completely disappeared on the basilar area and became very finer or nearly disappeared behind the post-basilar transverse depression, interstices of these striæ of punctures nearly impunctate; humeri strongly raised, free from the large distinct punctures, but with some very fine ones. Underside: thorax finely but sparsely pubescent-punctulate; prosternum widened posteriorly, very slightly arched backwardly at the hind margin, with a few very large punctures on the anterior area and many large punctures on the posterior area; pro-episterna with front margin very slightly arched backwardly; latero-ventral areas of pronotum impunctate and smooth; abdomen finely and rather thickly pubescent-punctulate. Legs: femora armed with a denticle on each underside near (fore-femora) or much beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ emarginate on each outer face at the apical part; claws appendiculate.

Male.—Antennæ longer and pro- and mesosternum much narrower than those of the female.

Length.—♂, 4.0 to 4.3 mm; ♀, 4.5 to 5.0 mm.

Local distribution.—Kuaru, Kôsyun-Gun, Takao-Syû (1 ♂ and 1 ♀, June 13, 1937; 5 ♂ ♂ and 5 ♀ ♀, June 15, 1937; M. Chûjô leg.).

Kankau in Kôshun-Distr., Taihoku and Kuraru (after M. Chûjô, 1938).

General distribution.—Formosa.

7a. BASILEPTA SAUTERI Chûjô var. UNICOLORIPENNE Chûjô.

Basilepta santeri ab. *unicoloripenne* CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin–Dahlem 1 5 (1938) 27 (Formosa: Taihoku).

The present variety differs from the original form by the elytra completely unicolor and without black stripe. In one specimen the legs almost blackish, with basal part of femora piceous or dark reddish brown.

Local distribution.—Taihoku (after M. Chûjô, 1938).

General distribution.—Formosa.

8. BASILEPTA SUBLATERALE (Clavareau).

Nodostoma sublaterale CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 57 (nom. nov.) (Formosa).

Basilepta sublaterale CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin–Dahlem 1 5 (1938) 27–28 (Formosa: Anping, Kankau in Koshun–Distr., Kosempo and Tainan).

Nodostoma lateralis [nec V. de Motschulsky (1866) from India; nec J. S. Baly (1876) from Borneo] MATSUMURA, Schädl. u. Nützl. Ins. Zuckerrohr Formosas (1910) 31–32, 56, *pl. 27, f. 4*, ♀ (Formosa: Taihoku); Zeitschr. f. Wiss. Insbiol. 4 6 (1910) 137 (Formosa: Taihoku and Taityu); Mém. Soc. Ent. Belgique 18 (1911) 140 (Formosa: Taihoku).

Body subquadrate-ovate, strongly convex and glabrous on the dorsum, finely but not very thickly pubescent on the underside together with legs. General color yellowish brown to reddish brown, lustrous; head often with a shade of greenish bronzy coloration; mouth-parts yellowish brown, with mandibles dark reddish brown to piceous or black; antennæ yellowish brown, with terminal segments more or less infuscated; pronotum generally stained with rather light greenish bronzy excepted the marginal area; elytra with median disc deep greenish bronzy from the base to a little before the apex and latero-marginal areas also deep greenish bronzy, sometimes the metallic coloration strongly reduced and only narrowly remaining on the sutural and lateral marginal areas (in these cases the metallic coloration may never be seen on the other areas); underside more or less with a shade of greenish bronzy.

Head with a groovelike impressed-line on each side of frons, extended back to the hind margin of eyes; vertex distinctly convex, rather weakly and sparsely punctured; frons gently convex, more strongly punctured than on the vertex, with a short longitudinal sulcus on the middle of the anterior area,

the sulcus sometimes more shortened and assumes an elongate punctiform; clypeus not separated from frons, flat or somewhat depressed, more strongly punctured than on the frons, with front margin gently emarginated. Antennæ filiform, only a little longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd slender, subclubate and somewhat curved, 3rd most slender and slightly thickened terminally, 4th slightly thicker than the 3rd but thinner than the 2nd and somewhat thickened terminally, the seven followings distinctly thicker than the 2nd but very much thinner than the 1st, with apex of the 11th pointed, the rough order of the length of these segments are as follows: 4>3≒1≒11>5>6>7>8>9>10>2. Pronotum very strongly transversal, about three times as wide as it is long, very strongly narrowed anteriorly, very strongly angulated on each side at a little before the basal end; front margin nearly straight and immarginated, front angles obtuse and bears a setigerous puncture on each tip, lateral margins sharply ridged with a slight curvature, basal angles tuberculate and bears a setigerous puncture on each apex, basal margin distinctly bordered and slightly sinuate on each side of the median part which is gently arched backwardly; dorsum transversely convex, strongly and thickly punctured, with a punctured furrow nearly along the front margin and the area between this furrow and front margin impunctate. Scutellum subpentagonal, narrowed posteriorly, strongly rounded at the latero-posterior corners, obtuse at the apical angle, impunctate or with a few fine punctures on the surface. Elytra elongate-subquadrate, narrowed and rounded at the apex; dorsum strongly convex, with a short transverse depression behind the basilar area which is somewhat convex, regularly punctate-striate, the punctures large and deep on the basal area but become rather finer posteriorly, interstices of these striæ of punctures almost flat and very finely but not thickly punctulate under a high power lens, the one of these interstices sinuously and not strongly costate on each side behind the humeral callus which is distinctly raised and free from the distinct punctures. Underside: prosternum strongly transversal, distinctly widened posteriorly, slightly arched backwardly at the hind margin, very coarsely and thickly punctate on the surface; pro-episterna with front margin very slightly arched backwardly; latero-ventral areas of pronotum distinctly and rather sparsely punctured. Legs: femora armed with a denticle

on each underside near (fore-femora) or beyond (middle- and hind-femora) the middle, middle- and hind-tibiæ emarginated on each outer face at the apical part, claws appendiculate.

Male.—Punctuation of pronotum generally finer and more sparsely settled than in the female.

Length.—♂, 3.00 to 3.25 mm; ♀, 3.75 to 4.00 mm.

Food plant.—*Saccharum officinarum* Linn. (Japanese name: *Satô-kibi*).

Local distribution.—Taihoku-Si, Taihoku-Syû (1 ♂, June, 1911, I. Nitobe leg.); Kôsyun, Kôsyun-Gun, Takao-Syû (4 ♀ ♀, April 15 to May 15, 1918, J. Sonan leg.).

Taihoku and Taityû (after S. Matsumura, 1910 and 1911); Taihoku (after Y. Miwa, 1931); Anping, Kankau in Koshun-Distr., Kosempo and Tainan (after M. Chûjô, 1938).

General distribution.—Formosa.

8a. BASILEPTA SUBLATERALE (Clavareau) var. IMMACULATIPENNE Chûjô.

Basilepta sublaterale ab. *immaculatipenne* CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 5 (1938) 28 (Formosa: Kankau in Koshun-Distr., Tainan, and Anping).

This variety differs from the original form in having the body entirely yellowish brown to reddish brown and without any metallic coloration or shimmer.

Local distribution.—Kuaru, Kôsyun-Gun, Takao-Syû (1 ♀, April 4, 1940, R. Matuda leg.).

Kankau in Koshun-Distr., Tainan, and Anping (after M. Chûjô, 1938).

General distribution.—Formosa.

9. BASILEPTA RUFICOLLE (Jacoby).

Nodostoma ruficolle JACOBY, Proc. Zool. Soc. London (1885) 205–206, 753, *pl. 11, fig. 10* (JAPAN: Nikko and Fukushima); SCHÖNFELDT, Cat. Col. Japan (1887) 147 (Japan: Nikko and Fukushima); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 56 (Japan); WINKLER, Cat. Col. Reg. Palæarcticæ 11 2 (1930) 1266 (Japan).

Basilepta ruficolle CHEN, Sinensia, Acad. Sinica 3 6 (1935) 305, 315–316 (Japan: Env. de Tokio); CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 26 (Formosa: Fuhosho).

Body very ovate or subquadrate-ovate, strongly convex and glabrous on the surface, finely but not very thickly pubescent, together with legs. General color black, strongly lustrous; head and pronotum, together with the latero-ventral areas of the latter, reddish brown or brownish red to rather dark red, lustrous; antennæ black, with four basal segments yellowish

brown to reddish brown and the apical part of the 4th segment more or less infuscated; mandibles partly or entirely piceous to black; maxillary palpi with apical segment more or less infuscated; claws, together with the apical part of the claw-segment of tarsi, light to dark yellowish brown.

Head with a short but distinct groove on each side of frons and the groove extended back to the hind margin of eye, very strongly and irregularly punctured, interspaces of these punctures rather rugose in some cases, finely but sparsely pubescent on the lateral and anterior areas; vertex distinctly convex; frons nearly flat, with a short longitudinal sulcus or impressed-line on the middle and a longitudinal ridge beyond the apical end of the former impressed-line, the ridge rather widened forwardly and extended to the inter-antennal area, more or less depressed and extended to the inter-antennal area, more or less depressed on each side of the ridge and rather broadly ridged again on the outer side of the depression; clypeus not separated from frons, nearly flat, with anterior area more or less depressed, front margin emarginate at the middle and distinctly angulate on each side of the emargination. Antennæ filiform, distinctly longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd very much shorter than any one of the others, subcylindrical, 2nd very much shorter than any one of the others, subcylindrical, rather thinned at base and somewhat curved, 3rd most slender, 4th slightly thicker than the 3rd but much thinner than the 2nd or 5th, 5th to 11th somewhat thickened and each one of them thicker than the 2nd but very much thinner than the 1st, with apex of the 11th bluntly or rather sharply pointed, the rough order of the length of these segments are as follows: $5>4\fallingdotseq6\fallingdotseq3\fallingdotseq7>11\fallingdotseq8\fallingdotseq9\fallingdotseq1>10>2$. Pronotum nearly three times as wide as it is long, widest at a little behind the middle, thence strongly narrowed towards both anterior and posterior extremities, the widest part abruptly rounded or bluntly angulated on each side; front margin nearly straight and immarginated, all the angles distinctly prominent and bears a setigerous puncture on each tip, lateral margins sharply ridged, basal margin distinctly bordered, the border widened at the median part which is somewhat arched backwardly; dorsum strongly transversely convex, very strongly and irregularly punctured, with a punctured groove along a little behind the front margin and generally impunctate between the groove

and front margin. Scutellum elongate-obtrigonate, rounded at the apex, lightly convex on the surface, with some very fine punctures. Elytra subquadrate, only a little longer than wide, much wider than pronotum, rounded at the apex; dorsum strongly convex, with a distinct transverse depression behind the basilar area which is separately somewhat convex and a subtriangular deep depression on each side at just behind the humeral corner and touched to the lateral margin, regularly striate-punctate, the punctures rather large and deep on the marginal area and also in the post-basilar transverse depression (in this area the punctuation more or less crowded), but on the other areas more finely and remotedly settled, interstices of the striæ of punctures bears a longitudinal row of very fine punctures on each; humeri very strongly elevated and very finely but sparsely punctulate. Underside: prosternum subtrapezoidal, widened posteriorly, slightly arched posteriorly at the hind margin, coarsely punctate on the surface which is somewhat convex on the middle viewed ventrally, but depressed and rugose on the marginal area; pro-episterna coarsely punctate, with front margin nearly straight or slightly emarginate; latero-ventral areas of pronotum impunctate or with a few large punctures. Legs: femora armed with a small but distinct tooth on each underside at (fore-femora) or a little beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ strongly emarginate on each outer face at the apical part; claws appendiculate.

Male.—Antennæ longer, pronotum narrower, prosternum not wider than long but rather wide, last abdominal sternite with apical margin nearly straight.

Female.—Prosternum distinctly wider than long, last abdominal sternite with apical margin widely and gently emarginate.

Length.—♂, 4.0 to 4.5 mm; ♀. 4.75 to 5.25 mm.

Local distribution.—Mt. Ari-san, Tainan-Syû (1 ♀, October 2 to 23, 1918, J. Sonan leg.); Karenkô, Karenkô-Tyû (1 ♀, July 20 to August 4, 1919, T. Okuni leg.); Ebosiyama, Ratô-Gun, Taihoku-Syû (1 ♂, May 17 to 21, 1933, M. Chûjô leg.). Fuhosho (after M. Chûjô, 1938).

General distribution.—Japan and Formosa.

9a. BASILEPTA RUFICOLLE (Jacoby) var. MELANICOLLE Chûjô.

Basilepta ruficolle ab. *melanicolle* CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 26 (FORMOSA: Kosempo).

This variety differs from the original form by the coloration only as follows: General color deep black, strongly lustrous, with labrum, palpi and median area of vertex reddish brown, and pronotum very narrowly bordered with yellowish brown at the front margin.

Local distribution.—Kosempo (after M. Chûjô, 1938).

General distribution.—Formosa.

10. BASILEPTA ELEGANS sp. nov.

Body very broadly oblong or subquadrate-oblong, strongly convex and glabrous on the dorsum, finely but not very thickly pubescent on the underside together with legs. General color reddish brown or brownish red, lustrous, and elytra greenish bronzy with brassy shimmer; six or seven terminal segments of antennæ, mandibles and tarsi (excepted the claws) more or less infuscated.

Head with a narrow groove on each side surrounds the upper and hind margins of eye, rather thickly or sparsely punctured; vertex distinctly convex; frons lightly convex, with a distinct longitudinal sulcus on the middle; clypeus not separated from frons, nearly flat on the surface and more thickly punctured than on the frons, somewhat elevated on each side, broadly emarginate at the front margin. Antennæ filiform, very much longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd nearly clubate and rather curved, 3rd most slender, 4th very slightly thicker than the 3rd, 5th to 11th a little thickened and each one of them rather thicker than the 2nd but very much thinner than the 1st, with apex of the 11th more or less pointed the rough order of the length of these segments are as follows: 4=5=11=3>7=1=6>8=9=10>2, 2nd very much shorter than the 10th, but the difference of the length between the neighboring two in the other ten segments not so remarkable. Pronotum nearly twice as wide as it is long, strongly rounded just in front of the base, strongly narrowed anteriorly with a gentle bisinuation; front margin nearly straight and immarginated, front angles obtuse and bears a setigerous puncture on each apex, lateral margins sharply ridged, basal angles tuberculate laterally and bearing a setigerous puncture on each tip, basal margin distinctly bordered and gently arched posteriorly at the median part; dorsum transversely convex, rather thickly punctured, the punctuation weaker anteriorly, with a distinct

punctured-groove along a little behind the front margin and the groove connected on each side with another distinct groove which includes a large puncture, very closely along the lateral margin, and the area between the front margin and post-frontal punctured-groove impunctate. Scutellum much longer than wide, nearly linguiform, somewhat pointed or rounded at the apex, lightly longitudinally depressed on the middle of surface, with some small punctures. Elytra subquadrate, a little longer than wide, narrowed and rounded at the apex; dorsum strongly convex, with basilar area separately lightly convex, bounded behind by a distinct transverse depression and post-humeral area distinctly depressed touching to the lateral margin, regularly or rather irregularly striate-punctate, generally more irregularly punctate on each side behind the humeral callus, the punctures large and deep on the basal area, but become rather finer posteriorly, interstices of these striæ of punctures very finely but not thickly punctulate and somewhat rugose on each side behind the humeral callus, the latter distinctly elevated and finely but not thickly punctulate. Underside: prosternum widened posteriorly, slightly arched backwardly at the hind margin, strongly and sparsely punctate on the surface; pro-episternum with front margin nearly straight; latero-ventral areas of pronotum coarsely punctate. Legs: femora armed with a denticle on each underside at (fore-femora) or beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ deeply emarginate on each outer face at the apical part; claws appendiculate.

Male.—Antennæ longer, prosternum not wider than long, last abdominal sternite with apical margin slightly emarginate at the middle but nearly straight on each side of the emargination, 1st segment of the fore- and middle-tarsi rather remarkably dilated.

Female.—Pronotum very much wider than long, last abdominal sternite with apical margin distinctly widely emarginated.

Length.—♂, 4.5 mm; ♀, 5.0 to 5.5 mm.

Local distribution.—Rimogan (altitude about 460 meters), Bunzan-Gun, Taihoku-Syû (3♂♂, **Holo-** and **Paratype**, May 12, 1933, M. Chûjô leg.); Ebosiyama (altitude about 400 meters), Ratô-Gun, Taihoku-Syû (1♀, **Allotype**, May 17 to 21, 1933. M. Chûjô leg.).

General distribution.—Formosa.

The present new species is closely allied to *Basilepta haroldi* (Jacoby) from Burma, Assam, Tenasserim, Malacca, Cochin-

China and Tonkin, but may be distinguished from it by the body larger, the pronotum wider with the front angles not tuberculate and the dorsum more thickly punctured, the scutellum not subpentagonal in outline and the elytra not so very regularly striate-punctate.

10a. BASILEPTA ELEGANS Chûjô var. MELANURUM nov.

This new variety differs from the original form by the coloration as follows: General color black, lustrous; elytra dark greenish bronzy, with brassy shimmer; mouth-parts and antennæ generally similarly colored as those of the original form, but rather darker or deeper; anterior or lateral marginal areas of the head, anterior marginal area of the pronotum and knees dark reddish brown, tibiæ piceous, and claws yellowish brown.

Length.—♀, 5.0 mm.

Local distribution.—Rimogan (altitude about 460 meters), Bunzan-Gun, Taihoku-Syû (1♀, **Holotype**, May 12, 1933, M. Chûjô leg.).

General distribution.—Formosa.

11. BASILEPTA GIGANTEUM Chûjô.

Basilepta giganteum CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 25–26 (Formosa: Taihorinsho, Shinchiku, and Urai).

Body broadly oblong or oblong-ovate, strongly convex and glabrous on the dorsum, finely but not very thickly pubescent on the underside together with legs. General color brassy or golden green, violaceous blue, violaceous blue with elytra greenish blue, etc., strongly lustrous; pro- and mesosternum, abdomen and tibiæ black, sometimes piceous, sometimes with a slight bluish or greenish shimmer; antennæ blackish brown to black, with four basal segments yellowish brown, but the inner face of the 1st segment and terminal part of the 4th one more or less infuscated; labrum light to dark reddish brown, mandibles pitchy red to piceous or black, palpi light yellowish brown; tarsi dark reddish brown to blackish, with claws always light or dark yellowish brown.

Head with a deep groove on each side nearly along the upper half of the inner margin of eye, the groove developed backwardly and closely surrounded the posterior margin of eye, very strongly and rather thickly rugose-punctate on the vertex and also on the clypeus, very strongly and sparsely punctate on the frons, very finely but not very thickly punctulate on the interspaces of the strong punctures; vertex distinctly convex

and the punctures on this area somewhat elongate longitudinally; frons very lightly convex, with a short longitudinal depression which includes an impressed line in its center and an oblique distinct and punctured groove on each side of the middle of anterior area; clypeus not distinctly separated from frons, more or less ridged on each side, the rugosities on the surface stronger on the anterior area and the punctures on this area somewhat elongate longitudinally as on the vertex, with front margin widely subtriangularly emarginated and angulated on each side of the emargination. Antennæ filiform, rather robust, rather more than half as long as the body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd clubate, somewhat curved and nearly equal in length to, but much thinner than, the 1st, 3rd very slightly longer but distinctly thinner than the 2nd, 4th rather longer and thicker than the 3rd, 5th to 11th dilated and each one of them distinctly wider than the 4th, with apex of the 11th bluntly pointed, the rough order of the length of these seven terminal segments are as follows: 5≒7 or 7≒5>11>6≒8>9>10, 5th nearly equal in length to the 4th, 9th slightly longer than the 2nd and the latter slightly longer than the 10th. Pronotum rather narrower than, or about, twice as wide as it is long, widest at the middle and dentate at this area on each side, thence narrowed towards both extremities, angulate on the midway in front and nearly obliquely straight behind; front margin nearly straight and immarginated, front angles rather strongly or obtusely dentate and bears a setigerous puncture on each tip, lateral margins sharply ridged and closely followed by a deep groove, basal angles tuberculate and bears a setigerous puncture on each apex, basal margin distinctly bordered and the border strongly dilated at the median area which is somewhat produced posteriorly; dorsum transversely convex, the convexity very strong on each side, microscopically finely punctulate throughout, rather sparsely clothed with large and deep punctures on the median area and the interspaces of these punctures not rugose, rather thickly clothed with very large and rather shallow punctures on each side and the interspaces of these punctures strongly rugose, a deep groove running rather closely along the front margin. Scutellum elongate, gently narrowed posteriorly, rounded at the apex, lightly convex on the surface, with some very small punctures. Elytra elongate-subquadrate, wider than pronotum, narrowed and rounded at the apex; dorsum strongly

convex, with basilar area separately lightly convex bounded behind by a transverse depression and limited from the humeral callus by a longitudinal punctured stria, and a deep longitudinally oblong depression on each side behind the humeral corner and touched to the lateral margin and the inner margin of the depression somewhat convex in a gently sinuate costa, strongly and regularly striate-punctate, the punctures becoming rather finer posteriorly, interstices of the striæ of these punctures very finely but not thickly punctulate and these punctures generally arranged in a regular or irregular longitudinal row on each interstice; humeri strongly convex, free from the large striated punctures, but finely and rather thickly punctulate. Underside: prosternum more or less longer than wide, strongly constricted on each side, slightly arched posteriorly at the hind margin, somewhat longitudinally convex on the surface viewed ventrally, with some large and deep punctures; pro-episterna with front margin nearly straight; latero-ventral areas of pronotum strongly and rather thickly punctate. Legs: femora armed with a tooth on each underside near (fore-femora) or beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ deeply emarginated on each outer face at the apical part; claws appendiculate.

Male.—Pronotum about one and a half times as wide as it is long, prosternum much narrower than of the female, last abdominal sternite with apical margin nearly straight, 1st segment of the fore-tarsi wider and rather thicker than the corresponding segments of the two hind pairs of legs.

Female.—Pronotum about twice as wide as it is long, last abdominal sternite with apical margin widely and gently emarginated.

Length.—♂, 4.5 to 5.0 mm; ♀, 5.25 to 5.50 mm.

Local distribution.—Rimogan, Bunzan-Gun, Taihoku-Syû (1 ♀, April 5, 1940, M. Chûjô leg.).

Taihorinsho, Shinchiku, and Urai (after M. Chûjô, 1938).

General distribution.—Formosa.

11a. BASILEPTA GIGANTEUM Chûjô subsp. CUPRARIUM Chûjô.

Basilepta giganteum subsp. *cuprarium* CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 26 (Formosa: Kankau in Koshun-Distr.).

Compared with the original form, the present subspecies differs in the following characters: Dorsal surface of the body cupreous, strongly lustrous, with head and sides of pronotum

and elytra greenish; underside and legs black, partly bears cupreous or greenish shimmer. Dorsal surface more strongly punctured, head and pronotum very finely and distinctly or indistinctly shagreened; pronotum rather broader and less strongly convex, interspaces of the punctures rather rough, with a deep and broad sulcus on each side closely along the lateral margin and including some large punctures in it, on a little inside of the sulcus there is another broad longitudinal depression which also bears some large punctures irregularly, and distinctly costate between these sulcus and depression, the angulations on each lateral margin stronger.

Length.—♂, 4.5 to 5.0 mm.

Local distribution.—Kosempo and Formosa (after M. Chûjô, 1938).

General distribution.—Formosa.

12. **BASILEPTA HIRAYAMAI (Chûjô).**

Nodostoma hirayamai CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 136–139 25 (1935) 77 (Loo-Choo: Iriomote-jima, Naha, and Ishigaki-jima); l. c. 142 25 (1935) 203, 210 (Loo-Choo: Iriomote-Is., Ishigaki Is., and Okinawa Is.).

Basilepta hirayamai CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 26 (Formosa: Kankau in Koshun-Distr.).

Body oblong or oblong-ovate, strongly convex and glabrous on the dorsum, finely but not very thickly pubescent on the underside together with legs. General color light to deep yellowish brown, lustrous, with mandibles dark reddish brown or piceous and terminal segments of antennæ somewhat infuscated.

Head with an oblique groove on each side of frons, extends back to the hind margin of eyes, very finely but not thickly punctulate under a high power lens; vertex distinctly convex, thickly punctured on the posterior area; frons lightly convex, with a short longitudinal sulcus on the middle, very sparsely punctulate; clypeus separated from frons by an arched row of a few large punctures, very sparsely punctate, somewhat depressed on the anterior area, with front margin rather widely emarginate. Antennæ filiform, distinctly longer than half the length of body, finely and thickly pubescent; 1st segment distinctly thickened and somewhat curved, 2nd nearly club-shaped and somewhat curved, 3rd most slender and gradually increasing the thickness from the base of this segment to the apex of 5th, 6th to 10 nearly equal in thickness to one another and each one of them rather thicker than the 5th, 11th rather thicker

than the 10th but much thinner than the 1st and more or less pointed at the apex, the rough order of the length of these segments are as follows: 4>5>1≒6≒7≒11>8>9>10>3>2. Pronotum about one and a half times as wide as it is long, somewhat angulated on each side at a little behind the middle and then strongly narrowed anteriorly and also basally, front margin nearly straight and immarginated, front angles somewhat denticulate and bears a setigerous puncture on each tip, lateral margins sharply ridged, basal angles tuberculate and bears a setigerous puncture on each apex, basal margin distinctly bordered and very slightly and widely arched backwardly at the median part; dorsum transversely convex, distinctly and rather sparsely punctured, the punctuation on the lateral areas much stronger than those on the median area, with a distinct punctured sulcus nearly along the front margin, but the sulcus obsolete on the median part, and the anterior marginal area impunctate. Scutellum subtrigonate, with apex rather angulated or rounded, dorsum flat or slightly convex and completely or pronotum, narrowed and rounded at the apex; dorsum strongly convex, with basilar area separately lightly convex bounded behind by a distinct transverse depression, regularly punctate-striate, the punctures rather large and deep on the basal area, but become rather finer posteriorly, interstices of these striæ of punctures with a rather regular longitudinal row of very fine punctures on each under a strong lens, and one of the interstices obtusely convex in an oblique short costa on each side behind the humeral callus; humeri strongly raised, free from the large striated punctures, but microscopically finely and sparsely punctulate. Underside: prosternum widened posteriorly, nearly straight at the hind margin, more or less depressed on each, anterior and posterior, side of the middle and coarsely punctate; pro-episterna with front margin nearly straight or very slightly arched backwardly; latero-ventral areas of pronotum impunctate. Legs: femora armed with a denticle on each underside more or less beyond the middle; middle- and hind-tibiæ emarginated on each outer face at the apical part; claws appendiculate.

Male.—Antennæ longer than those of the female; prosternum distinctly longer than wide; abdomen strongly and commonly longitudinally excavated and very thickly clothed with long pubescence on each side of the excavation, with apical margin

of the last sternite weakly sinuate on each side of the median part.

Female.—Prosternum rather wider than long; abdomen with apical margin of the last sternite widely straight.

Length.—♂, 2.5 to 3.0 mm; ♀, 3.0 to 3.5 mm.

Local distribution.—Taihoku-Si, Taihoku-Syû (1♂, June 10, 1908, T. Shiraki leg.); Kôsyun, Kôsyun-Gun, Takao-Syû (3♂♂ and 4♀♀, April 25 to May 25, 1918, J. Sonan leg.); Sintiku, Sintiku-Syû (1♂ and 1♀, July 1 to 30, 1918, J. Sonan leg.); Musya, Nôkô-Gun, Taityû-Syû (1♀, May 18 to June 15, 1919, T. Okuni, leg.); Mt. Sô-zan, Sitisei-Gun, Taihoku-Syû (1♂, June 10, 1932, M. Chûjô leg.); Urai, Bunzan-Gun, Taihoku-Syû (1♀, June 15, 1932, M. Chûjô leg.); Tonroku, Bunzan-Gun, Taihoku-Syû (1♂, May 25, 1934, M. Chûjô leg.); Raisya, Tyôsyû-Gun, Takao-Syû (2♀♀, July 26, 1935, Y. Miwa leg.).

Kankau in Koshun-Distr. (after M. Chûjô, 1938).

General distribution.—Loo-Choo and Formosa.

13. BASILEPTA ISSIKII sp. nov.

Body ovate, strongly convex and glabrous on the dorsum, finely and rather thickly pubescent on the underside together with legs. General color yellowish brown, with elytra rather lighter, lustrous; mandibles pitchy red, antennæ with seven terminal segments infuscated, elytra margined with black which is rather widened on the basal margin and also on the basal part of the sutural margin, but almost obsolete on the latero-apical margins.

Head with a groove on each side of the frons touched to the upper and upper half of the inner margins of eye; vertex distinctly convex, strongly and thickly rugose-punctate; frons lightly convex, rather sparsely punctate, the punctures much smaller than those on the vertex or clypeus, with a short central longitudinal impressed-line on the anterior area; clypeus not separated from frons, nearly flat on the surface, coarsely punctured, with front margin somewhat emarginate at the middle and angulate on each side of the emargination. Antennæ slender, filiform, much longer than half the length of body, finely and thickly pubescent; 1st segment distinctly thickened and a little curved, 2nd somewhat thickened, thinned towards both extremities and rather curved, 3rd very slender, 4th very slightly thicker than the 3rd and these two segments very weakly thickened terminally, 5th to 11th somewhat thickened and each

one of them nearly equal in thickness to the 2nd but much thinner than the 1st, with apex of the 11th pointed, the rough order of the length of these segments are as follows: 5≒4>6≒7≒11≒1>3≒8≒9≒10>2, the difference of the length between the 10th and 2nd very distinct, but the differences between the 4th and 6th and also the 1st and 3rd are not so remarkable. Pronotum about twice as wide as it is long, widest at only a little behind the middle and thence strongly narrowed towards both, anterior and posterior, extremities; front margin nearly straight and not bordered, front angles rather obtusely tuberculated and bears a setigerous puncture on each tip, lateral margins sharply ridged and abruptly rounded at only a little behind the middle, where the pronotum widest as mentioned in above, basal angles distinctly tuberculate and bears a setigerous puncture on each apex, basal margin distinctly bordered and gently rounded posteriorly at the median part; dorsum transversely convex, strongly and rather thickly punctured, the punctuation very much stronger on the lateral areas than on the middle, with a distinct punctured groove along a little behind the front margin, but the groove obsolete on the median part. Scutellum rather longer than wide, narrowed posteriorly, angulated at the apex, with dorsum lightly convex and nearly impunctate. Elytra elongate-subquadrate, wider than pronotum, narrowed and rounded at the apex; dorsum strongly convex, with basilar area separately lightly convex, a distinct transverse depression just behind the basilar area, and a strong longitudinal depression on each side behind the humeral corner and touched to the lateral margin, regularly striate-punctate, the punctures rather large and deep on the basal area, but become rather finer posteriorly, interstices of these striæ of punctures nearly impunctate and almost flat, but rather convex in a curved costa on each side behind the humeral callus and separated from the latter by an oblique row of the distinct punctures; humeri strongly elevated and nearly impunctate. Underside: prosternum nearly trapezoidal, strongly widened posteriorly, nearly as long as wide, somewhat constricted on each side between the fore-coxæ and this area longitudinally convex viewed ventrally, nearly straight at the hind margin, coarsely punctate on the surface; pro-episternum impunctate, with front margin nearly straight; latero-ventral areas of pronotum punctured near the base; last abdominal sternite with apical margin gently emarginate. Legs: femora armed with a denticle on each

underside at (fore-femora) or beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ emarginate on each outer face at the apical area; claws appendiculate.

Length.—♀, 3.75 mm.

Local distribution.—Miharasi (altitude about 2,000 meters) in Mt. Taihei-zan, Taihoku-Syû (1♀, **Holotype**, May 9, 1942, S. Issiki leg.).

General distribution.—Formosa.

This new species is somewhat allied to *Basilepta nigrofasciatum* (Jacoby) from Bengal and Burma, but may be distinguished from it by the body rather smaller, the head and pronotum strongly punctured, the pronotum not toothed on each side behind the middle and the elytra broadly tinged with black on the basal margin not only the sutural and lateral margins.

The specific name is dedicated in honor to the discoverer, Prof. Dr. S. Issiki, of this interesting species.

14. BASILEPTA CONSIMILE sp. nov.

Body oblong-ovate, distinctly convex and glabrous on the dorsum, finely but not very thickly pubescent on the underside together with legs. General color reddish brown, lustrous; antennæ with four basal segments pale yellowish brown and the remaining slightly infuscated; mandibles pitchy red; scutellum reddish brown, with apical part infuscated; elytra black, lustrous, with humeral calli dark reddish brown and apical area rather light reddish brown or yellowish brown; apical part of femora and basal parts of tibiæ somewhat infuscated.

Head with an oblique punctured stria on each side of the anterior area of frons and the stria connected to the groove surrounds the hind margin of eye, sparsely punctured and the punctures on the frons much smaller than those on the clypeus; vertex distinctly convex; frons lightly convex, with median area almost flat and a weak central longitudinal impression on the anterior area; clypeus obscurely separated from frons by an arched row of a few large punctures, gently longitudinally convex, with front margin notched at the middle and somewhat angulated on each side of the emargination. Antennæ filiform, distinctly longer than half the length of body, finely and thickly pubescent; 1st segment strongly convex and somewhat curved, 2nd nearly clubate, rather curved and distinctly shorter than any one of the others, 3rd and 4th very much thinner than

any one of the others and the 4th slightly thicker than the 3rd, 5th to 11th somewhat thickened and each one of them rather thicker than the 2nd but much thinner than the 1st, with apex of the 11th pointed, and the rough order of the length of these segments are as follows: 5=4=11=6=7=8=9=10=1=3>2. Pronotum rather narrower than twice as wide as it is long, widest at a little behind the middle, where the lateral margins distinctly rounded and thence rather gently narrowed anteriorly with a gentle curvature, but strongly narrowed posteriorly; front margin nearly straight and immarginated, all the angles tuberculate and bears a setigerous puncture on each tip, lateral margins sharply ridged, basal margin distinctly bordered and broadly but weakly arched backwardly at the median area; dorsum rather strongly transversely convex, strongly and rather sparsely punctured, the punctuation coarser laterally, with a punctured groove along a little behind the front margin, the groove distinct on each side but obsolete at the median part. Scutellum nearly linguiform, distinctly longer than wide, narrowed posteriorly, obtusely angulate at the tip; dorsum very lightly convex, finely shagreened, finely but not thickly punctulate. Elytra elongate-subquadrate, somewhat wider than pronotum, rather gradually narrowed posteriorly and rounded at the apex; dorsum strongly convex, regularly striate-punctate, the punctures large and deep on the basal area, but becoming rather fined posteriorly, interstices of the striæ of punctures nearly impunctate or with a few punctures irregularly on each and almost all of them nearly flat or only very slightly convex, but two of them distinctly costate on each side at a little behind the humeral callus, the inner one of these costæ very short and straight (the presence of this costa will probably be a female character), but the outer one very long and oblique, with an elongate deep depression on each side behind the humeral corner and touched to the lateral margin, basilar area separately convex, bounded from the basal marginal area and also from behind by a transversal depression respectively, and limited from the sutural marginal area and also from the humeral callus by a distinctly depressed and punctured stria respectively; humeri very strongly elevated, nearly impunctate or with a few very fine punctures irregularly. Underside: prosternum distinctly longer than wide, strongly widened posteriorly, nearly straight at the hind margin, uneven and coarsely punctate on the surface; pro-episternum impunctate, with front

margin slightly emarginate; latero-ventral areas of pronotum coarsely punctate. Legs: femora armed with a sharp denticle on each underside near (fore-femora) or much beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ deeply emarginate on each outer face at the apical part; claws appendiculate.

Length.—♀, 3.25 mm.

Local distribution.—Mt. Ari-san (altitude about 2,280 meters), Tainan-Syû (1 ♀, Holotype, October 25, 1935, M. Chûjô leg.).

General distribution.—Formosa.

The present new species is very closely related to *Basilepta apicipenne* Chen from China (Moupin in Szechuan), but may be distinguished from it by the body smaller, the head neither strongly nor thickly punctured, the pronotum more strongly and thickly punctured than on the head, the underside of body not infuscated in the coloration and the terminal segments of antennæ not so strongly infuscated.

15. BASILEPTA BICOLORATUM sp. nov.

Body broadly oblong, strongly convex glabrous on the dorsum, finely but rather sparsely pubescent on the underside together with legs. Head, prothorax and mesosternum dark reddish or brownish red, lustrous, with mandibles piceous to black; antennæ piceous to black, rather opaque, with basal segments yellowish brown and more or less lustrous; scutellum pitchy red to dark piceous, lustrous, with medio-basal area often light brownish red; elytra and abdomen deep black, lustrous; mesopleura dark brownish red to piceous or black, lustrous, and in the strongly infuscated cases often margined with reddish coloration; methathorax black, lustrous, generally bordered with reddish coloration; legs black, lustrous, with coxæ, trochanters and terminal segments of tarsi dark reddish together with claws, sometimes the bases of femora, apices of tibiæ and basal segments of tarsi also dark reddish.

Head with an oblique short groove on each side of frons and the groove extends back to the top of eye, distinctly and sparsely punctate, the punctuation coarser anteriorly; vertex distinctly convex; frons lightly convex, with a short central longitudinal sulcus or impressed-line on the anterior area; clypeus not separated from frons, declined forwardly at the anterior area, with front margin emarginate at the middle and distinctly lobed forwardly on each side of the emargination. Antennæ

filiform, somewhat longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd subclubate and rather curved, 3rd most slender and slightly thickened terminally, 4th rather thicker than the 3rd but very much thinner than the 2nd and weakly thickened terminally, 5th to 11th somewhat thickened and each one of them distinctly thicker than the 2nd but thinner than the 1st, with apex of the 11th bluntly pointed, the rough order of the length of these segments are as follows: 11=5=6=7> 1>8>4>9>3>10>2, but the difference of the length between each neighboring two segments is not so remarkable excepted the case of the 2nd segment. Pronotum about two and a half times as wide as it is long, widest at only a little behind the middle where the lateral margins abruptly rounded and thence strongly narrowed anteriorly and also posteriorly; front margin nearly straight and immarginated, front angles denticulate and bears a setigerous puncture on each apex, lateral margins sharply ridged, basal angles tuberculate and bears a setigerous puncture on each tip, basal margin distinctly bordered and very widely but slightly arched backwardly at the median part; dorsum transversely convex, strongly and rather thickly punctured, the punctuation much stronger and thicker on the lateral areas than on the middle, with a punctured groove nearly along the front margin, the groove very distinct on each side but rather obtuse at the middle, a narrow area between the front margin and the above-mentioned punctured groove impunctate. Scutellum subpentagonal, rather narrowed posteriorly, with apical angle often more or less obtuse; dorsum slightly convex, very finely punctulate or obtusely shagreened with a few fine punctures under a strong lens. Elytra elongate-subquadrate, narrowed and rounded at the apex; dorsum strongly convex, with basilar area separately convex bounded behind by a deep transverse depression and limited from the humeral callus by a deep longitudinal punctured stria, regularly striate-punctate, the punctures large and deep on the basal area, but become very finer posteriorly and somewhat smaller on the basilar area, interstices of these striæ of punctures very finely but not thickly punctulate under a high power lens and these punctures often arranged in regular or irregular longitudinal striæ on each interstice, the two interstices more or less raised in short costæ on each side just behind the humeral callus, the inner one costa straight and much shorter than the outer one, the

latter oblique and gently sinuate; humeri strongly raised, microscopically finely but not thickly punctulate, generally without large punctures, but sometimes with a few of them. Underside: prosternum widened posteriorly, nearly straight or slightly arched backwardly at the hind margin, depressed on each, anterior and posterior, side of the middle of surface, coarsely punctate; pro-episterna coarsely punctured, with front margin nearly straight or very slightly emarginate; latero-ventral areas of pronotum strongly and rather thickly punctured. Legs: femora armed with a sharp denticle on each underside near (fore-femora) or much beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ emarginate on each outer face at the apical part; claws appendiculate.

Male.—Antennæ longer, lateral costæ on each side of the elytra weaker, prosternum distinctly narrower and longer than wide (not so in the female), last abdominal sternite with apical margin more narrowly straight.

Length.—♂, 4.0 mm; ♀, 4.0 to 4.5 mm.

Local distribution.—Kôsyun, Kôsyun-Gun, Takao-Syû (2♀♀, **Paratype**, April 15 to May 15, 1918, J. Sonan leg.); Kusukusu, Kôsyun-Gun, Takao-Syû (1♀, **Paratype**, April 20, 1928, J. Sonan leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1♂, **Holotype**; 1♀, **Allotype**; and 1♀, **Paratype**, June 13, 1937, M. Chûjô leg.).

General distribution.—Formosa.

This new species very closely resembles *Basilepta ruficolle* (Jacoby) from Japan and Formosa in general appearance, but differs from it by the body smaller, the pronotum distinctly narrower, widest at only a little behind the middle and thence more strongly narrowed towards both extremities, more thickly punctured on the disc and the post-frontal punctured-groove obsolete at the median part, the pro- and mesosternum not black, the elytra more strongly punctured and with two costæ on each side just behind the humeral callus.

16. BASILEPTA VARIANS sp. nov.

Body broadly oblong, strongly convex and glabrous on the dorsum, finely but rather sparsely pubescent on the underside together with legs. Coloration variable, in some cases entirely yellowish brown or reddish brown and in other cases almost entirely black, but in many cases partly reddish brown and partly piceous or black, the melanic individuals may be seen more frequently in the female at present before me; in all cases distinctly lustrous.

Head with a short and narrow but distinct groove, which surrounds the hind margin of eye at the posterior portion, on each side of frons, strongly and rather thickly punctured, the punctuation stronger anteriorly; vertex distinctly convex; frons flat, with a short longitudinal sulcus on the middle of anterior area; clypeus not distinctly limited from frons, slightly longitudinally convex, with front margin subtriangularly emarginated. Antennæ filiform, much longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd shortest, very much thinner than the 1st but much thicker than the 3rd and gently curved, 3rd most slender, 4th rather thicker than the 3rd but much thinner than the 5th, 5th to 11th lightly thickened and subequal in thickness to each other, with apex of the 11th pointed, the rough order of the length of these segments are as follows: 1>5>4>3>6>7>11>8>9>10>2, but the difference of the length between each two of them not so large excepted the case of the 2nd. Pronotum about twice as wide as it is long, distinctly angulated on each side at just behind the middle; front margin straight and immarginated, front angles weakly denticulate and bears a setigerous puncture on each tip, lateral margins sharply ridged, basal angles tuberculated and bears a setigerous puncture on each apex, basal margin distinctly bordered, slightly and gently sinuously arched backwardly; dorsum strongly transversal, very strongly and thickly punctured, with a row of distinct punctures along a little behind the front margin and almost impunctate between the front margin and the present transversal row of punctures. Scutellum subtrigonate, slightly convex and nearly impunctate on the surface. Elytra elongate-subquadrate, narrowed and rounded at the apex; dorsum strongly convex, with basilar area separately convex and bounded at behind by a strong transverse depression, regularly punctate-striate, the punctures very large and deep on the basal area, but becoming very finer posteriorly, interstices of these striæ of punctures nearly impunctate or extremely finely but very sparsely punctulate under a very high power lens, the two of these interstices more or less raised in short costæ on each side behind the humeral callus, the latter strongly raised and microscopically finely but not thickly punctulate. Underside: prosternum rather longer than wide, widened posteriorly, nearly straight at the hind margin, coarsely pubescent-punctate on the surface; pro-episterna with front margin slightly arched

backwardly; latero-ventral areas of pronotum very strongly and thickly punctured. Legs: femora armed with a denticle on each underside near (fore-femora) or much beyond (middle- and hind-femora) the middle; middle- and hind-tibiæ emarginated on each outer face at the apical part; claws appendiculate.

Male.—Antennæ much longer than half the length of body; lateral costæ on the elytra very weakly raised, the inner one straight, very much shorter and weaker than the outer one and frequently obsolete, the outer one oblique and gently sinuate.

Female.—Antennæ only a little longer than half the length of body; lateral costæ on the elytra distinctly raised, the inner one straight and much shorter than the outer one, the latter oblique and gently sinuate.

Length.—♂, 2.75 to 3.00 mm; ♀, 3.00 to 4.25 mm.

Local distribution.—Kôsyun, Kôsyun-Gun, Takao-Syû (2 ♀ ♀, **Cotype**, April 25 to May 25, 1918, J. Sonan leg.); Sintiku, Sintiku-Syû (4 ♂ ♂ and 2 ♀ ♀, **Cotype**, July 1 to 30, 1918, J. Sonan leg.); Mt. Ari-san (altitude about 2,250 meters), Tainan-Syû (2 ♀ ♀, **Cotype**, October 2 to 23, 1918, J. Sonan leg.); Mt. Hinokiyama (altitude about 1,500 meters), Bunzan-Gun, Taihoku-Syû (1 ♂ and 2 ♀ ♀, **Cotype**, July 22, 1929, Y. Miwa leg.); Urai (altitude about 400 meters), Bunzan-Gun, Taihoku-Syû (2 ♂ ♂ and 3 ♀ ♀, **Cotype**, June 15, 1932, M. Chûjô leg.); Siigao (altitude about 200 meters), Tikutô-Gun, Sintiku-Syû (2 ♂ ♂ and 2 ♀ ♀, **Cotype**, June 27 to 30, 1934, M. Chûjô leg.); Mt. Sô-zan (altitude about 400 meters), Sitisei-Gun, Taihoku-Syû (1 ♀, **Cotype**, September 18, 1938, M. Chûjô leg.); Mt. Taihei-zan (altitude about 1,850 meters), Ratô-Gun, Taihoku-Syû (1 ♀, **Cotype**, July 10, 1940, R. Matuda leg.).

General distribution.—Formosa.

This new species is somewhat allied to *Basilepta melanopus* (Lefèvre) from Tonkin, but may be distinguished from it by the coloration more variable, the pronotum angulated on each side behind the middle, the elytra punctuation not surrounded by piceous ring in the light-colored examples, the head strongly and rather thickly punctured, and all the femora armed with a small but distinct denticle on each underside.

17. BASILEPTA TAIWANUM sp. nov.

Body oblong, with dorsum strongly convex and glabrous, underside finely but not thickly pubescent together with legs. General color yellowish brown to reddish brown, lustrous,

generally with mandibles, terminal segments of antennæ, apical parts of femora, tibiæ and tarsi infuscated in various degrees and often deep black, but on the contrary these parts not infuscated in some cases with exception of the mandibles.

Head with a short groove on each side of the frons, extending back to the hind margin of eyes, distinctly and rather sparsely punctured, the punctuation finer and sparser on the frons; vertex distinctly convex; frons lightly convex, but the anterior area almost flat or slightly depressed and bears a short longitudinal sulcus (which is sometimes obsolete) in the middle; clypeus not distinctly separated from frons, slightly depressed on each, anterior and posterior, side of the middle, subtriangularly emarginate at the middle of front margin. Antennæ filiform, distinctly longer than half the length of body, finely and thickly pubescent; 1st segment distinctly thickened and somewhat curved, 2nd very much thinner than the 1st but much thicker than the 3rd and somewhat curved, 3rd thinnest, 4th slightly thicker than the 3rd but much thinner than the 5th, 5th to 11th weakly and nearly equally thickened and each one of them slightly thicker than the 2nd, with apex of the 11th bluntly pointed, the rough order of the length of these segments are as follows: 5≒4≒6≒1≒7≒3≒11>8≒9≒10>2. Pronotum about twice as wide as it is long, narrowed in front, distinctly angulated on each side at a little behind the middle; front margin nearly straight and immarginated, front angles denticulate and bears a setigerous puncture on each apex, lateral margins distinctly ridged, basal angles tuberculated and bears a setigerous puncture on each tip, basal margin distinctly bordered and weakly and widely arched backwardly at the median part; dorsum transversely convex, very strongly and thickly punctured, with a punctured groove nearly along the front margin, but the groove obsolete at the median part, impunctate between the front margin and the above-mentioned punctured groove. Scutellum subpentagonal, gently narrowed posteriorly, nearly flat or slightly convex on the surface, impunctate or with a few fine punctures. Elytra elongate-subquadrate, narrowed and rounded at the apex; dorsum strongly convex, with a rather shallow transverse depression behind the basilar area which is lightly convex, regularly punctate-striate; the punctures rather large and deep on the basal area,

but becoming rather finer posteriorly, interstices of these striæ of punctures bears a longitudinal row of very fine punctures on each under a strong lens, and one of the interstice shortly and weakly convex in an oblique costa behind the humeral callus and separated from the latter by two or three transversely arranged strong punctures; humeri distinctly raised, without large punctures, but microscopically finely but not thickly punctulate. Underside: prosternum rather longer than wide, somewhat widened at behind, nearly straight at the hind margin, almost entirely excavated on the surface or hollowed on each, anterior and posterior, side of the middle, coarsely punctured; pro-episterna with front margin straight or slightly arched posteriorly; latero-ventral areas of pronotum very strongly and thickly punctured. Legs: femora armed with a denticle on more or less beyond the middle of each underside; middle- and hind-tibiæ emarginate on each outer face at the apical part; claws appendiculate.

Male.—Antennæ rather longer than those of the female; lateral costæ of elytra rather weaker than those of the female.

Length.—♂, 3.25 to 3.50 mm; ♀, 3.75 to 4.00 mm.

Local distribution.—Kôsyun, Kôsyun-Gun, Takao-Syû (2♂♂ and 2♀♀, **Cotype**, April 25 to May 25, 1918, J. Sonan leg.); Kahodai (altitude about 900 meters) in Mt. Hassen-zan, Taityû-Syû (1♂, **Cotype**, July 1, 1932, M. Chûjô leg.; 1♀, **Cotype**, June 3, 1942, S. Issiki leg.); Hôrin, Hôrin-Gun, Karenkô-Tyô (1♂, **Cotype**, August 25, 1934, M. Chûjô leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1♀, **Cotype**, April 4, 1940, R. Matuda leg.); Hakurei (altitude about 1,500 meters) in Mt. Taihei-zan, Taihoku-Syû (1♂, **Cotype**, May 10, 1942, A. Tanaka leg.).

General distribution.—Formosa.

The present new species is closely allied to *Basilepta hirayamai* Chûjô from Loo-Choo and Formosa in general appearance, but may be distinguished from it by the body robuster, the head and pronotum more strongly and thickly punctured, and the pro-epimera very strongly and thickly punctured as on the pronotum (in *B. hirayamai* Chûjô the pro-epimera impunctate).

Tribe II. PAGRIINI

Pagriites Lefèvre, Ann. Soc. Ent. France Bull. (6) 4 (1884) 67.
Pagriitæ Lefèvre, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 62.
Pagriini Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 355–356.
Pagriini Clavareau in Junk et Schenkling, Col. Cat. 69 (1914) 61.
Nodinini Chen, Sinensia, Acad. Sinica 5–6 11 (1940) 486–489 (pars).

General characters.—Body short, ovate, convex, glabrous on the dorsum. Eyes entire or slightly emarginated at the inner margin, deeply and broadly sulcated above. Antennæ filiform, scarcely longer than half the length of body. Pronotum distinctly bordered on each side which is angulated at or behind the middle. Prosternum subquadrate between the fore-coxæ. Pro-episterna with front margin straight or slightly arched posteriorly. Legs rather elongate; femora with a denticle on each underside; middle- and hind-tibiæ emarginated on the outer side at or near the apex; claws appendiculate.

This group is represented by a single genus only.

Genus iii. PAGRIA Lefevre

Pagria LEFÈVRE, Ann. Soc. Ent. France Bull. (6) 4 (1884) 67; Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 62; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 356; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 234, 324–325; l. c. 5–6 11 (1940) 488.

Genotype: *Pagria suturalis* LEFÈVRE, Ann. Soc. Ent. France Bull. (6) 4 (1884)) 67 from Zanzibar [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 356].

Range: Ethiopian and Oriental Regions; Manchurian Subregion.

General characters.—Body short, ovate, convex, with dorsum glabrous, but underside more or less pubescent, together with antennæ and legs.

Head inserted in prothorax up to the hind margin of eyes, obliquely or nearly perpendicularly placed to the longitudinal axis of body, deeply and widely sulcate above the eyes, narrowly but deeply grooved on each side of frons and the groove connected to the former, supra-ocular sulcus bears a distinct setigerous puncture on the connecting-point; clypeus not separated from frons, with front margin emarginated at the middle. Mouth-parts: labrum transverse rectangular, rounded at the front corners, nearly flat or gently transversely convex on the dorsum, with anterior marginal area somewhat emarginate-depressed and front margin finely pubescent; mandibles robust, arched inwardly, angulated at the apex with a weak angulation below it, deeply hollowed at the inner face; maxillary palpi slender, with 1st segment extremely smaller than any one of the three others, 2nd clubate and somewhat curved, 3rd gently thickened terminally and shorter than the 2nd or 4th, the latter thickest before the middle, gently thinned basally but strongly

terminally and truncated at the apical extremity; labial palpi very slender, with 1st segment minute, 2nd clubate and somewhat curved, 3rd nearly equal in shape to the corresponding segment of the maxillary palpi but very much thinner than the latter. Eyes nearly ovate, with inner margin entire or scarcely emarginated, distinctly convex and rather coarsely facetted. Antennæ filiform, rather longer than half the length of body, finely pubescent, with 1st segment distinctly thickened and somewhat curved 2nd very much thinner than the 1st but much thicker than the 3rd, the latter most slender, 4th rather thicker than the 3rd but thinner than the 5th, the latter and the six succeedings nearly equal in thickness, with apex of the 11th more or less pointed. Pronotum transverse, wider at base than the anterior marginal area, transversely convex on the dorsum; front margin arched anteriorly and not bordered at the median area but widely bordered on each side by the presence of a distinct groove along it, all the angles distinct and bears a setigerous puncture on each tip, lateral margins distinctly bordered and somewhat angulated at or near the middle, basal margin distinctly bordered and gently arched forwardly on each side of the median area which is distinctly arched posteriorly. Scutellum obtrigonate or near it. Elytra much longer than wide, distinctly wider at the base than of pronotum, subparallel-sided, somewhat developed downwardly on each side near the base, narrowed and rounded at the apical area, entirely covering the abdomen; dorsum convex, with a depression behind the basilar area of each elytron, regularly punctate-striate, the punctures often much feebler or obsolete towards the apex; humeri strongly raised, free from the striated punctures; elytral epipleura obliquely placed to the dorsal convexture, gradually narrowed from the base to near the apex, impunctate and smooth. Underside: prosternum broad between the fore-coxæ, very short before the coxal-cavities, somewhat widened posteriorly, nearly straight at the hind margin; pro-episterna subtrigonate, with front margin straight or slightly arched posteriorly; mesosternum much wider than long between the middle coxæ, somewhat constricted on each side, emarginated at the hind margin from one end to the another; metasternum very much wider than long, with a distinct central longitudinal suture and a small tubercle on the middle of the anterior end, the tubercle divided in two parts by the anterior end of the longitudinal suture; abdomen simple. Legs rather elongate; fermora form a fusiform between

the base and a little before the apex, subcylindrical at the apical part and bears a denticle at (fore-femora), or beyond (middle- and hind-femora), the middle of each underside; tibiæ gently thickened terminally, unarmed the spur, with middle- and hind-pair emarginated on the outer side at or near the apex; tarsi with 1st segment very much longer than any one of the two followings, 2nd subtrigonate, 3rd deeply bilobed, claw-segment clubate and somewhat curved; claws appendiculate.

Key to the species

1. Elytra reddish brown or yellowish brown, with subcircular raised-area on each elytron, more or less paler than the others in general, sutural margins more or less infuscated in many cases, lateral margins often entirely or partly infuscated, post-basal depression and post-humeral area frequently infuscated.
   i. Body smaller, 1.8 to 2.4 mm in length ..... *signata* (Motschulsky)
   i'. Body larger 2.5 to 2.8 mm in length. *signata* (Motschulsky) subsp. *grandis* Chûjô
1'. Elytra piceous to black, with a short and narrow yellowish longitudinal stripe between the humeral callus and basal raised-area in general ..... *flavopustulata* (Baly)

18. PAGRIA SIGNATA (Motschulsky).

Metachroma signata MOTSCHULSKY, Etud. Ent. 7 (1858) 110–111 (Burma).

Nodostoma signata GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3373 (E. India).

Pagria signata JACOBY, Fauna Brit. India (1908) 356–357, *f. 129* (Nilgiris in S. India, Burma, Ceylon, China, and Japan); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 62 (E. India, Burma, Ceylon, China, and Japan); WEISE, Philip. Jour. Sci. 21 (1922) 451 (Philippines: Los Baños and Mt. Maquiling in Luzon); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1267 (Japan); CHEN, Sinensia, Acad. Sinica 3 6 (1935) 325–326 *f. 24* (China: Chensi, Nanking, and Shanghai in Kiangsu, Kiangsi, Chusan in Chekiang, Pin-Fa in Kweichow; Tonkin); YAMAMOTO, Kagaku no Nogyo 4 17 (1937) 122 (Japan: Is. Sado); Ho in WU, Cat. Ins. Sinensium 3 (1937) 809 (China: Shensi, Nanking, Shanghai, Kiangsi, Chekiang, Chusan, and Pin-Fa in Kweichow); CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 171 27 (1937) 272 (Japan: Aonebagoe in Is. Sado); Bull. Umeno Ent. Lab. 6 (1938) 7 (Japan: Kurume in Kyusyu); Kontyu, Ent. Soc. Nippon 2 14 (1940) 76–77 (Japan: Tano-mati and Nisitoyo-naga-mura, both in Koti-Ken, Sikoku); Trans. Nat. Hist. Soc. Formosa 209 21 (1941) 65 (Korea: Mt. Kongo-zan); Mushi, Fukuoka Ent. Soc. 2 14 (1942) 57 (Kwantung-Prov.: Ryosuizi).

Nodostoma consimile BALY, Trans. Ent. Soc. London (1874) 168–169 (Japan: Nagasaki and Tsu-sima; China: Chusan); LEWIS, Cat. Col. Japanese Archipel. (1879) 28 (Japan); JACOBY, Proc. Zool.

Soc. London (1885) 753 (Japan); SCHÖNFELDT, Cat. Col. Japan (1887) 147 (Japan: Nagasaki and Tsu-shima; China: Chusan); JACOBY, Fauna Brit. India (1908) 357 (Synonymized to *Pagria signata* Motschulsky).

Nodostoma consimilis GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3372 (Nagasaki).

Pagris consimilis LEFÈVRE, Notes Leyden Mus. 9 (1887) 260.

Pagria signata Mots. var. *Anceyi* PIC, Mélanges Exot.-Ent. 53 (1929) 35 (Japan).

Pagria signata Mots. var. *rufithorax* PIC, Mélanges Exot.-Ent. 53 (1929) 35 (Tonkin).

Pagria signata Mots. var. *innotata* PIC, Mélanges Exot.-Ent. 53 (1929) 35 (Tonkin).

Pagria signata Mots. ab. *ussuriensis* ROUBAL, Boll. Soc. Ent. Italiana 5–6 61 (1929) 98 (E. Siberia: Vladivostok).

Pagria flavopustulata ab. *bicolor* (nec J. Weise, 1922) CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 28 (Formosa: Akau).

The present species is rather widely distributed and very variable in the coloration and close structures. The general shape of the body is shortly ovate, but in the larger specimens it is subquadrate-oavte. The coloration of the type-specimen described by V. Motschulsky is as follows:

Testacea, subtus minusve infuscata, antennis pedibusque subalbo-testaceis, capitis margine, thorace elytrorumque sutura et maculis duabus impressis anticis saepissime nigris (♂?); labro testaceo, oculis albis; scutello, testaceo vel nigro.

And, after that, the several color-varieties noticed by M. Jacoby (1908) are as follows:

Var. *a:* Thorax more or less æneous.
Var. *b:* Elytra with lateral and sutural margins black.
Var. *c:* Above fulvous.

Recently, the several color-varieties named by M. Pic (1929) are as follows:

Var. *Anceyi:* La coloration générale claire roussâtre ou testacée avee les élytres à suture foncée.

Var. *rufithorax:* Pâles avec une bande suturale métallique et une macule basale discale foncée.

Var. *innotata:* La coloration générale est foncée, les élytres jaunes bordés en partie de foncé avec la suture foncée, mais sans macule.

Besides these enumerated above, the other color-variations may also occur. Thus in some specimens, head, pronotum and sutural margin of elytra may be more or less æneous; in others, pronotum may be partly black, especially near the sides; rarely the dorsum is almost entirely black (recorded from Vladivostok

by J. Roubal in 1929 and also from Kiangsi by S. H. Chen in 1935); and in many cases, the basal raised-area of each elytron paler than the general color of elytra and also the post-humeral areas more or less infuscated touched to the lateral margins. In general the underside is less variable in coloration, with thorax and abdomen being almost always dark colored and legs flavous or fulvous.

Head: general structures as in the generic description; rather finely and sparsely punctulate, or rather coarsely and thickly so, somewhat convex on the vertex, nearly flat on the frons which is somewhat depressed at the anterior area and with a fine short sulcus on the middle longitudinally; clypeus subrectangular, widened anteriorly, not distinctly separated from frons, notched at the middle of front margin which is strongly or rather obsoletely bordered by the presence of a groove nearly along it. Antennæ filiform, rather longer than half the length of body, finely pubescent, with the segments subequal in length to each other but differs in thickness as follows: 1st segment strongly incrassate, thickest and somewhat curved, 2nd much thinner than the 1st but thicker than the 3rd and gently curved, 3rd most slender, 4th rather thicker than the 3rd but thinner than the 2nd or 5th, 5th and the six succeedings nearly equal in thickness to the 2nd, with apex of the 11th bluntly pointed. Pronotum transverse, about one and a half times as wide as it is long, rather narrowed in front; front margin strongly arched anteriorly and the most part immarginated, but widely bordered on each side in a short distance by the presence of a transverse groove along it, lateral margins narrowly bordered, widest and angulated behind the middle, basal margin narrowly but distinctly bordered and the median part gently arched posteriorly, all the angles with a setigerous puncture on each tip; dorsum strongly transversely convex, subcylindrical at the anterior area, punctate throughout, the punctures finer and sparser on the middle area but very large, deep and thickly settled on each side in general, in some cases, however, the median disc also very strongly punctured. Scutellum nearly obtrigonate, with dorsum nearly flat or slightly convex and impunctate or with a few very fine punctures. Elytra elongate-subquadrate, wider than pronotum, narrowed and rounded at the apical area, entirely covering the abdomen; dorsum convex, with a subcircular raised-area on the base of each elytron and a distinct depression behind the raised-area, regularly punctate-striate, the punctures fairly

distinct or sometimes rather strongly impressed before the middle except the basal raised-area which is impunctate, but behind the middle obsolete or absent; on each side behind the humeral callus (which is strongly raised and impunctate) is one or two short ridges. Underside very finely pubescent-punctulate prosternum nearly trapezoidal, widened posteriorly, nearly straight or very faintly emarginate at the hind margin, very coarsely and rugosely punctate on the surface; pro-episterna with front margin scarcely arched posteriorly or nearly straight; mesosternum coarsely and rugosely punctate or impunctate and smooth. Legs: femora armed with a denticle on each underside about or beyond the middle; middle and hind-tibiæ distinctly emarginate on the outer side at the apical area, but fore-tibiæ simple; claws appendiculate.

Length.—♂ ♀, 1.8 to 2.4 mm.

Food plant.—*Glycine Max* Merr. (Japanese name: *Azuki*) (after M. Chûjô, 1940).

Local distribution.—Karenkô, Karenkô-Tyô (1 Ex., April, 1910, I. Nitobe, leg.); Tauran, Karen-Gun, Karenkô-Tyô (2 Exs., April 23, 1910, I. Nitobe leg.); Sintiku, Sintiku-Syû (2 Exs., July 1 to 30, 1918, J. Sonan leg.); Musya, Nôkô-Gun, Taityû-Syû (2 Exs., May 18 to June 15, 1919, T. Okuni leg.); Mt. Kappan-zan, Taikei-Gun, Sintiku-Syû (3 Exs., May 6, 1930, J. Sonan leg.); Heitô, Takao-Syû (1 Ex., August 19, 1932, Y. Miwa leg.).

Akau (after M. Chûjô, 1938).

General distribution.—India, Ceylon, Burma, Indo-China, China Kwantung Province, Korea, Japan, Formosa, and Philippines.

18a. PAGRIA SIGNATA (Motschulsky) subsp. GRANDIS Chûjô.

Pagria signata MOTSCHULSKY subsp. *grandis* CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 28 (Formosa: Kankau in Koshun-Distr., Koshun, Shinchiku, Taito, and Kwarenko).

This subspecies differs from the original form in having the body much larger and robuster, the vertex and frons more strongly convex or raised, the supra-ocular sulci very much deep and very much strongly widened posteriorly, and the pronotum more coarsely and sparsely punctate.

General color yellowish brown to reddish brown, lustrous, with elytral suture almost always more or less infuscated; sometimes pronotum partly stained with piceous or black on the disc; scutellum more or less infuscated in some cases; elytra

often with an infuscated area in each post-basal excavation and also on each post-humeral area along the lateral margin; elytral epipleura entirely or partly (generally the basal area) more or less infuscated; underside partly or entirely infuscated in many cases.

Length.—♂ ♀, 2.5 to 2.8 mm.

Local distribution.—Musya, Nôkô-Gun, Taityû-Syû (1 Ex., **Cotype**, May 18 to June 15, 1919, T. Okuni leg.); Mizuho, Tamazato-Gun, Karenkô-Tyô (2 Exs., **Cotype**, March 23, 1935, M. Chûjô leg.); Tipon, Taitô-Gun, Taitô-Tyô (1 Ex., **Cotype**, March 25, 1935, M. Chûjô leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1 Ex., **Cotype**, March 28, 1935, M. Chûjô leg.).

Kankau in Koshun-Distr., Koshun, Shinchiku, Taito, and Kwarenko (after M. Chûjô, 1938).

General distribution.—Formosa.

19. PAGRIA FLAVOPUSTULATA (Baly).

Nodostoma flavo-pustulatum BALY, Trans. Ent. Soc. London (1874) 169 (Japan: Nagasaki and Tsu Sima); LEWIS, Cat. Col. Japanese Archipel. (1879) 28 (Japan); JACOBY, Proc. Zool. Soc. London (1885) 753 (Japan).

Nodostoma flavopustulata GEMMINGER et HAROLD, Col. Cat. 11 (1874) 3372 (Nagasaki).

Nodostoma flavopustulatum SCHÖNFELDT, Cat. Col. Japan (1887) 147 (JAPAN: Nagasaki and Tsu-shima).

Pagria flavo-pustulata JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 356 (Belgium in India, Japan, and Sumatra).

Pagria flavopustulatus CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 62 (Japan, E. India, and Sumatra).

Pagria flavopustulata LEFÈVRE, Notes Leyden Mus. 9 (1887) 260; WEISE, Philip. Jour. Sci. 21 (1922) 451 (Philippines: Los Baños, Mt. Maquiling, Benguet, Baguio, Tayabas, and Malinao, all in Luzon); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1267 (Japan); CHÛJÔ, Bull. Umeno Ent. Lab. 2 (1935) 14 (Japan: Kurume in Kyusu); Arb. Morph. Taxon. Ent. Berlin–Dahlem 1 5 (1938) 28 (Formosa: Pilam and Kosempo); Kontyu, Ent. Soc. Nippon 2 14 (1940) 76 (Japan: Nisitoyonaga-Mura in Koti-Ken, Sikoku).

Pagria flavopustulata BALY ab. *bicolor* WEISE, Philip. Jour. Sci. 21 (1922) 451 (Philippines).

Body short, ovate, convex, glabrous on the dorsum, pubescent on the underside together with antennæ and legs. General color black, lustrous; antennæ (with terminal segments slightly infuscated in many cases), palpi and legs yellowish brown, front margin of clypeus and labrum yellow- or

red-brown, mandibles reddish brown and partly infuscated; anterior marginal area of pronotum dark yellow-brown to piceous; elytra piceous to deep black, with lateral and apical areas frequently lighter than the median disc and humeral calli also more lighter, each elytron with a short longitudinal yellowish stripe between the humeral callus and basal raised-area; rarely the elytra entirely brownish yellow, or brownish yellow in general with sutural and lateral margins blackish (ab. *bicolor* Weise).

Head: vertex convex, coarsely and deeply punctured; frons flat, coarsely punctured, bounded on each side by a distinct groove which is connected to the supra-ocular sunken orbit, lightly depressed on the anterior area, with a very narrow and short longitudinal sulcus on the middle; clypeus nearly trapezoidal, widened anteriorly, not distinctly separated from frons, gently longitudinally convex, coarsely punctate, distinctly bordered at the front margin which is emarginated at the middle, with a long seta on a little inside of each lateral end of the anterior marginal area. Antennæ filiform, rather longer than half the length of body, finely pubescent; 1st segment strongly thickened and somewhat curved, 2nd rather thickened terminally, somewhat curved, much thinner than the 1st but distinctly thicker than the 3rd, 3rd most slender, 4th rather thicker than the 3rd but thinner than the 2nd or 5th, 5th and the six succeedings nearly equal in thickness to the 2nd with apex of the 11th bluntly pointed, and these segments nearly equal in length to each other. Pronotum one-third wider than long, narrowed in front, angulated behind the middle on each side, convex on the dorsum, subcylindrical at the anterior part, strongly and rather thickly punctured, the punctures much coarser and thicker on each side than on the middle, all the margins bordered with exception of the median area of front margin which is rather arched anteriorly, all the angles furnished with a distinct setigerous puncture on each. Scutellum nearly obtrigonate, with a gentle curvature on each side near the apex, the latter obtusely angulate or nearly rounded, weakly convex on the surface, often shallowly depressed on the basal extremity, finely but very sparsely punctulate. Elytra longer than wide, wider than pronotum, gently widened posteriorly, but then narrowed and rounded at the apical part, entirely covering the abdomen; dorsum convex, with a transverse depression behind the basal raised-area, regularly punctate-striate,

the punctures finer on the basilar space and towards the apex, interstices of these punctured striæ almost flat but distinctly raised in two short costæ behind each humeral callus, the latter strongly raised and free from the puncture. Underside: prosternum broader than long, widened posteriorly, scarcely emarginate from one end to another at the hind margin, coarsely punctate on the surface with a distinct depression along the front and hind margins; pro-episterna with front margin very slightly arched posteriorly. Legs: all the femora armed with a minute denticle about or beyond the middle of each underside, but sometimes the one or two or all of them almost or completely reduced; middle- and hind-tibiæ notched on the outer side at the apical area, but fore-tibiæ simple; claws appendiculate.

Length—♂ ♀, 1.8 to 2.3 mm.

Food plant. Glycine Max Merr. (Japanese name: *Daizu*) (after M. Chûjô, 1940.

Local distribution.—Kôsyun, Kôsyun-Gun, Takao-Syû (1 Ex., April 25 to May 25, 1918, J. Sonan leg.); Hori, Nûkô-Gun, Taityû-Syû, (1 Ex., May to August, 1918, H. Kawamura leg.); Mt. Ari-san, Tainan-Syû (1 Ex., October 2 to 23, 1918, J. Sonan leg.); Taitô, Taitô-Tyô (1 Ex., February 5 to March 27, 1919, S. Inamura leg); Musya, Nôkô-Gun, Taityû-Syû (3 Exs., May 15 to 18, 1919, T. Okuni leg.); Mt. Kappan-zan, Taikei-Gun, Sintiku-Syû (3 Exs., May 16, 1930, J. Sonan leg.).

Pilam and Kosempo (after M. Chûjô, 1938).

General distribution.—Japan, Formosa, Philippines, Sumatra, and E. India.

Tribe III. METACHROMINI

Metachromites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 295.

Metachromitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 92.

Metachromini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 378.

General characters.—Body ovate or oblong, elongate or shortened, convex and glabrous on the dorsum, more or less pubescent on the underside together with antennæ and legs, rarely entirely pubescent. Head exserted or inserted in prothorax. Antennæ long and filiform. Pronotum generally distinctly bordered on each side, but rarely rather obsoletely marginated. Pro-episterna with front margin straight or arched posteriorly. Middle- and hind-tibiæ emarginated on the outer side near or at the apex. Claws bifidate.

This group contains nine genera and represented by two genera in Formosa.

Key to the genera

a. Head with a deep groove on each side of face along the inner and upper margins of eye, pronotum not subglobose or subcylindrical, elytra about as wide at base as pronotum ..... *Rhyparida* Baly

a'. Head not sulcated on each side as in above, pronotum subglobose or subcylindrical, elytra much wider at base than pronotum. *Chrysopida* Baly

Genus iv. RHYPARIDA Baly

Rhyparida BALY, Ent. Jour. 1 (1861) 286; Trans. Ent. Soc. London 2 4 (1867) 163; l. c. (1877) 40, nota; JACOBY, Ann. Mus. Civ. Stor. Nat. Genova 20 (1884) 197; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 94; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 379; WEISE, Nova Guinea, IX, Zool. 3 (1912) 425.

Marsaeus CLARK, Journ. Ent. 2 (1864) 252.

Genotype: *Rhyparida dimidiata* BALY, Journ. Ent. 1 (1861) 286 from Moreton-Bay in Australia [Fixed by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 378].

Range: Oriental and Australian Regions.

General characters.—Body subquadrate-ovate or ovate or oblong or subelongate in outline, with dorsum convex and glabrous; underside more or less pubescent together with antennæ and legs.

Head deeply inserted in prothorax, obliquely or perpendicularly placed to the longitudinal axis of body, distinctly sulcated above the eyes, deeply grooved on each side of frons touched to the inner margin of eye and connected to the supra-ocular sulcus; frons not limited from clypeus or delimited from it by a transverse (frequently sinuous) groove which is connected on each side to the anterior end of the infra-ocular groove, and often with a central longitudinal groove; clypeus subtrigonate, longer than wide, strongly widened anteriorly, with front margin emarginated at the middle. Mouth-parts: labrum rather wider than long, parallel-sided, gently rounded and pubescent at the front corners, more or less emarginated at the middle of front margin, flat or slightly transversely convex on the surface, but the anterior marginal area more or less depressed or inclined downwardly and bears a few large setigerous punctures along the front margin of the posterior flat or slightly convex area; mandibles robust, strongly curved inwardly, acum-

inated at the apex, deeply hollowed at the inner face with the lower margin distinctly dentate below the apex; maxillary palpi rather slender, with 1st segment very much shorter than any one of the three followings, 2nd very thin at the basal part but strongly thickened terminally and rather curved, 3rd somewhat thickened terminally and much shorter than either the 2nd or 4th, the latter very strongly elongate conical with apical extremity truncated; labial palpi also rather slender, with 1st segment extremely smaller than any one of the two succeedings, 2nd very thin at the basal part but strongly thickened terminally and somewhat curved, 3rd strongly elongate conical and truncated at the apical extremity. Eyes large, broadly oblong or oblong-ovate with inner margin deeply emarginate, not strongly convex and rather coarsely facetted. Antennæ slender, filiform, much longer than half, but rather shorter than the whole, the length of body, with 1st segment distinctly thickened and somewhat curved, 2nd shortest in many cases but sometimes rather longer than the 3rd, 3rd and 4th most slender, the seven succeedings rather thicker than the 4th respectively but thinner than the 1st, with apex of the 11th more or less pointed. Pronotum transverse, more or less narrowed in front; all the margins distinctly bordered, all the angles distinct, front margin produced anteriorly on each side and bears a distinct setigerous puncture at each lateral extremity, lateral margins distinctly rounded, basal margin slightly gently sinuated on each side of the middle, bears a distinct setigerous puncture on each lateral extremity, the median somewhat arched posteriorly and more widely bordered, dorsum transversely convex with latero-anterior areas more strongly deflexed. Scutellum more or less narrowed posteriorly, distinctly angulated at the apex, with lateral margins more or less angulated or rounded behind the middle or near the apex. Elytra elongate, nearly as wide at the base as of the pronotum but much wider than the latter behind the humeral region, more or less rounded on each side, narrowed and rounded at the apex, entirely covering the abdomen, distinctly convex on the dorsum with humeri separately conically raised and impunctate; each elytron with thirteen regular longitudinal punctured striæ, the 1st scutellar one is as usually short, the 9th to 11th being in the space between the hinder portion of the humeral callus and the middle of disc, and are often confluent at their commencement, while the 12th is only visible at the base and apex, its middle portion being lost in the 13th (external

marginal) stria; elytral epipleura horizontal, broad at the base, gradually narrowed posteriorly and disappeared near the apex, impunctate and smooth on the surface. Underside: prosternum nearly trapezoidal, widened posteriorly, somewhat constructed on each side between the fore-coxæ, longer than wide or about as wide as long, with hind margin not sharply bordered and nearly straight or gently rounded; pro-episterna with front margin arched posteriorly; mesosternum subquadrate between the middle-coxæ, with posterior corners more or less dilated latero-posteriorly and hind margin more or less emarginated on each side of the middle; metasternum very large and strongly transverse, with a distinct central longitudinal suture; abdomen simple. Legs rather robust; femora strongly incrassate medially, constricted near the apex, often with a tooth on the underside; tibiæ gently thickened terminally, longitudinally channeled on the dorsal or outer face, middle- and hind-tibiæ distinctly emarginated on the outer side at the apex; tarsi with two basal segments trigonate respectively and longitudinally grooved on the middle of their dorsum, the first segment somewhat longer than the 2nd, 3rd segment deeply bilobed, claw-segment clubate and somewhat curved; claws bifidate.

Without remarkable secondary sexual character in general.

Key to the species

1. Body 2.75 to 3.75 mm in length; clypeus widely emarginated at the front margin; pronotum strongly and very thickly punctured; elytra not distinctly wider than pronotum, with a faint transverse depression behind the basilar area, without sexual difference in the structure on each posthumeral area ..... *kotœnsis* sp. nov.

1'. Body 2.50 to 3.25 mm in length; clypeus narrowly emarginate at the front margin; pronotum much more strongly but sparsely punctured than in the preceding species; elytra distinctly wider than pronotum, with a strong transverse depression behind the basilar area and a distinct sexual difference in the structure on each posthumeral area ..... *basileptoides* sp. nov.

20. RHYPARIDA KOTOENSIS sp. nov.

Body rather broadly oblong. General color deep yellowish brown to chestnut brown, lustrous, with a slight brassy shimmer on the upperside; head and prothorax weakly to strongly stained with bronzy, but antennæ (the terminal segments somewhat infuscated), mouth-parts (the mandibles with apical parts piceous to black) and prosternum concolorous with the general color.

Head obliquely or nearly perpendicularly placed, inserted in prothorax up to the hind margin of the eyes, finely shagreened throughout, coarsely and rather thickly punctured, with an oblique sulcus on each side of frons along the inner margin of eye and connected to the general supra-ocular sulcus, sometimes with a short longitudinal groove on the middle of frons; vertex distinctly convex; frons slightly convex or nearly flat; clypeus much wider than long; somewhat widened anteriorly, not delimited from frons, nearly flat or slightly depressed on the middle, with front margin emarginated at the middle and somewhat tuberculated anteriorly on each side of the former emargination. Antennæ filiform, rather more than half as long as the body, finely pubescent; 1st segment longest, distinctly thickened and somewhat curved, 2nd longer and thicker than the 3rd, the latter shortest and thinnest, 4th nearly equal in size to the 2nd, the seven remainders somewhat thickened and subequal in size to each other with apex of the 11th bluntly pointed. Pronotum transverse, more than twice as wide as it is long, strongly rounded on each side and somewhat arched posteriorly at the middle of basal margin which is distinctly bordered, rather obtusely toothed at each angle and furnished with a distinct setigerous puncture on each tip, the front angle nearly 90° in angulation and the basal angle much larger than the 90°; dorsum strongly transversely convex, with latero-marginal areas rather widely reflexed to the convexture, finely shagreened throughout, rather coarsely and thickly punctured. Scutellum rather large, narrowed posteriorly, weakly angulated at the posterior end, slightly convex on the surface which is finely shagreened and often with a few very fine punctures. Elytra much longer than wide, markedly convergent at the basal part, narrowed and rounded at the apex, entirely covering the abdomen; dorsum convex, with a faint transverse depression below the basilar area, distinctly punctate in eleven regular longitudinal rows (including a short scutellar and an external marginal row) on each elytron and, besides these, there are two other rows (which are connected to each other at their anterior and posterior ends) between the 8th and 9th primary rows, and moreover with an oblique short row (which is connected to the ante-median part of the external marginal row) on the outer side of the basal part of the 9th primary row, interstices of these longitudinal rows of punctures very finely but sparsely punctulate and almost flat with the exception of one of a few

lateral ones which are more or less convex. Underside entirely finely shagreened and pubescent-punctulate; prosternum longer than wide, somewhat constricted between the fore-coxæ, longitudinally convex with a transverse groove along the hind margin which is nearly straight; pro-episterna with front margin gently arched posteriorly. Legs rather robust; femora strongly incrassate medially, constricted behind the apex and armed with an obtuse angulation or denticle on the underside beyond the middle; tibiæ thickened terminally and unarmed the spur, middle- and hind-tibiæ distinctly emarginated before the apical end of the outer side; claws bifidate.

Male.—Pro- and mesosternum narrower, last abdominal sternite with apical margin nearly straight.

Female.—Last abdominal sternite with apical margin gently emarginated.

Length.—♂, 2.75 to 3.25 mm; ♀, 3.50 to 3.75 mm.

Local distribution.—Kôtô-syo (Botel-Tobago Is.), Taitô-Tyô (2 ♂ ♂, **Paratype**, February 3, 1908, T. Shiraki leg.; 1 ♀, **Paratype**, March 10 to April 14, 1920, T. Okuni leg. ; 1 ♂, **Paratype**, September 24, 1923, T. Okuni leg.; 1 ♂ and 1 ♀, **Paratype**, March to April, 1932, S. Hirayama leg.; 1 ♂, **Holotype** and 1 ♀, **Allotype**, April, 1936, Y. Chûjô leg.).

General distribution.—Formosa (Botel-Tobago Is.).

This new species is somewhat allied to *Rhyparida bicostulata* Weise from Luzon, Philippines, but differs from it by the head and pronotum generally more infuscated with a distinct metallic sheen on the upper side, the head very strongly and thickly punctured throughout as well as pronotum and the elytra not so strongly costate on each side.

21. RHYPARIDA BASILEPTOIDES sp. nov.

Body oblong, very finely shagreened under a high power lens with exception of the elytra, distinctly convex and glabrous on the dorsum, finely pubescent on the underside together with legs. General color yellowish brown to reddish brown, with mandibles piceous, lustrous, frequently with cupreous or cupreo-bronzy shimmer on the dorsum and in these cases the metallic shimmer generally stronger on the pronotum than on the elytra.

Head with an oblique long groove on each side of frons, extending back to the hind margin of eyes where it is distinctly widened, rather strongly and sparsely punctured; vertex and frons commonly convex, with distinct central longitudinal sulcus on the anterior area of frons; clypeus rather obtusely limited

from frons by a subtriangular depression or impressed-line, narrowly emarginate at the middle of front margin, more strongly punctured to the surface than on the frons. Antennæ filiform, only a little longer than half the length of body, finely and thickly pubescent; 1st segment strongly thickened and somewhat curved, 2nd shortest and somewhat curved, 3rd most slender and longer than the 2nd but shorter than the 4th, 4th rather thicker than the 3rd but thinner than the 2nd, 5th nearly equal in size to the 4th and much thinner than the 6th, the six following segments gradually thickened terminally from the base of the 6th, 6th to 10th subequal in length to each other and each one of them nearly equal in length to the 5th, 11th nearly spindle-shaped, much longer than the 10th and nearly equilength to the 1st. Pronotum about one and a half times as wide as it is long; front margin nearly straight and immarginated, front angles denticulate and bears a setigerous puncture on each tip, lateral margins ridged and obtusely angulated near the front corner and also near the base, basal angles tuberculate and bears a setigerous puncture on each apex, basal margin distinctly bordered and gently and widely arched backwardly at the median part; dorsum strongly transversely convex, strongly and rather sparsely punctured with exception of the anterior marginal area, the punctuation much stronger and thicker on the lateral areas than on the median disc. Scutellum narrowed posteriorly, subtrigonate or subpentagonal, with dorsum nearly flat or slightly convex and impunctate. Elytra elongate-subquadrate, much wider than pronotum, narrowed and rounded at the apex; dorsum strongly convex, with basilar area lightly convex and bounded behind by a more or less distinct transverse depression; each elytron with eleven longitudinal regular rows of punctures (including a short scutellar and an external marginal row), the punctures more or less large and deep on the basal half, but become very finer posteriorly, the 10th row divided in two parts at a little behind the humeral callus, the basal short one of them turned outwardly and connected to the 11th row (the external marginal row), but the other longer one conjoined at its base to the 9th row, interstices of the rows of punctures very finely but sparsely punctulate under a high power lens; humeri distinctly raised, free from the large striated punctures, but extremely finely punctulate as on the above mentioned interstices. Underside: prosternum more or less widened posteriorly, nearly straight at the hind margin, somewhat depressed

on each, anterior and posterior, side of the median area, coarsely punctate on the posterior area; pro-episterna with front margin slightly arched backwardly. Legs: femora armed with a denticle near (fore-femora) or beyond (middle- and hind-femora) the middle of each underside; middle- and hind tibiæ emarginate on each outer face at the apical part and strongly angulated at just before the angulation; claws bifidate.

Male.—Elytra with an obtusely convex and short interstice on each side behind the humeral callus, prosternum longer than wide.

Female.—Elytra with an oblique and strongly raised costa, which is divided in two parts by a depression before the middle of it, on each side at a little behind the humeral callus; prosternum not longer than wide.

Length.—♂, 2.5 to 2.8 mm; ♀, 2.75 to 3.25 mm.

Local distribution.—Kôtô-syo (Botel-Tobagos), Taitô-Tyô (1♀, **Paratype**, July 30, 1908, T. Shiraki leg.; 1♂ and 1♀, **Paratype**, March 10 to April 14, 1920, T. Okuni leg.; 1♂ and 1♀, **Paratype**, April, 1936, Y. Chûjô leg.; 1♂, **Holotype** and 1♀, **Allotype**, June 20 to July 10, 1938, M. Chûjô leg.).

General distribution.—Formosa (Botel-Tobago Is.).

This new species is very closely allied to the species belonging to the genus *Basilepta* Baly in the general appearance and also in many characters, but may be belonged to the present genus by the claws bifidate, and differs from the preceding species by the front margin of clypeus more narrowly emarginate, the pronotum much narrower and the punctuation very much coarser, the elytra much wider than pronotum and with a distinct transverse depression behind the base and a distinct sexual character on each side behind the humeral callus.

Genus v. CHRYSOPIDA Baly

Chrysopida BALY, Journ. Ent. 1 (1861) 288; Trans. Ent. Soc. London 2 4 (1867) 159; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 299; LEFÈVRE, Mém. Soc. Roy. Sic. Liége (2) 11 (1885) 98.

Genotype: *Chrysopida donis* BALY, Journ. Ent. 1 (1861) 289 from Luzon, Philippines [synonym of *Chrysopida attelaboides* (Erichson), Nova Acta Leop. Carol. Suppl. 1 16 (1934) 271, *pl. 39, f. 11* (*Colaspis*) from Luzon, Philippines].

Range: Philippines and Formosa (Botel-Tobagos).

General characters.—Body elongate-oblong, subcylindrical, metallic or non-metallic in coloration, rarely entirely pubescent, but generally the dorsum partly or entirely glabrous.

Head well exserted, perpendicularly or obliquely placed to the longitudinal axis of body, sulcated above the eyes or not so, subglobose behind the eyes; clypeus distinctly separated from frons or not so, with front margin concave-emarginate in the middle. Mouth-parts; labrum transverse, more or less narrowed anteriorly, rounded and finely pubescent at the front margin, nearly flat or rather transversely convex on the surface with anterior marginal area more or less depressed or bending downwardly, sparsely pubescent-punctate on each side of the middle along the anterior border of the main flat area; mandibles large, robust, arched inwardly, bluntly pointed at the apex, hollowed at the inner face with a tooth or angulation near the apex of its lower margin; maxillary palpi rather robust, with 1st segment extremely smaller than any one of the three others, 2nd nearly clubate and somewhat curved, 3rd thickened terminally and rather shorter but thicker than the 2nd, 4th longer than the 3rd and nearly elongate-conical with apex bluntly pointed; labial palpi also rather robust, with 1st segment minute, 2nd nearly clubate and somewhat curved, 3rd about as long as the 2nd and nearly spindle-shaped with apex bluntly pointed. Eyes comparatively large, rather strongly convex, rather coarsely facetted, nearly reniform with inner margin emarginate at the middle. Antennæ filiform, much longer than half the length of body but shorter than the whole length of the latter, finely pubescent, with 1st segment strongly thickened and somewhat curved, 2nd shortest, 3rd to 5th slender, 6th to 11th somewhat thickened and the apex of 11th bluntly or rather sharply pointed. Pronotum subglobular or subcylindrical, truncated at the anterior and basal parts, distinctly or indistinctly margined on each side, all the corners with a large setigerous puncture on each tip. Scutellum narrowed posteriorly, rounded or truncated or angulated at the apex. Elytra longer than wide, much wider at the base than pronotum, rather rounded on each side or parallel-sided, narrowed and rounded at the apical area, separately rounded at the apical extremity of each elytron, convex on the dorsum, with humeri separately raised; elytral epipleura obliquely placed to the dorsal convexture, very narrow and gradually narrowed from the base to near the apex of elytron. Underside; prosternum broad between the fore-coxæ, but not wider than long, somewhat constricted on each side, widened posteriorly, with hind margin straight or more or less emarginated; pro-episterna subtrigonate, with front margin straight or rather emarginated;

mesosternum transverse between the middle-coxæ, lightly constricted on each side, strongly rounded at the hind angles and strongly emarginate-depressed between them; metasternum strongly transverse, with a distinct central longitudinal suture; abdomen simple, entirely covered by the elytra or a part of the last tergite exposed beyond the apex of elytron. Legs comparatively robust, long; femora strongly incrassate medially, constricted near the apex and armed with a denticle on each underside beyond the middle; tibiæ thickened terminally, longitudinally sulcate and ridged, middle- and hind-tibiæ with apical area emarginated at the outer side; tarsi with two basal segments subtrigonate and longitudinally sulcate or depressed on the middle of each dorsum, the 1st segment generally longer than the 2nd, 3rd segment deeply bilobed, claw-segment clubate and somewhat curved; claws bifidate.

Secondary sexual characters not remarkable.

22. **CHRYSOPIDA MURINA Baly.**

Chrysopida murina BALY, Trans. Ent. Soc. London 2 4 (1867) 162 (Philippines); GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3385 (Philippines); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 98 (Philippines); WEISE, Philip. Jour. Sci. 2 (1922) 478, 479 (Philippines: Benguet and Baguio in Luzon).

Chrysopida curta LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 99 nota (Philippines: Luzon, Samar, and Babuyanes); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 98 (Philippines: Luzon, Samar, and Babuyanes).

Chrysopida murina ab. *curta* WEISE, Philip. Jour. Sci. 21 (1922) 478, 479 (Philippines: Mts. Maquiling and Banahao in Luzon).

Chrysopida murina ab. *signifera* WEISE, Philip. Jour. Sci. 21 (1922) 479 (Philippines).

Body elongate- or subelongate-oblong, entirely thickly clothed with griseous pubescence. General color black, sometimes piceous or reddish brown, rather opaque in one glance by the existence of the hair-clothing, with a few basal segments of antennæ (partly or entirely), palpi and legs yellowish brown to reddish brown, but the terminal segments of palpi, hind-coxæ knees, and tarsi frequently more or less infuscated, labrum piceous to black with outer margin generally bordered with yellow- or red-brown; each elytron with a transverse, often interrupted in two or three parts, yellow- or red-brown band (*murina murina* Baly), the band sometimes entirely disappeared (*murina* ab. *curta* Lefèvre) and in other cases it is well developed together with the other samely colored markings as follows:

one or two longitudinal stripes situated at the inner side of humeral callus, one transverse band (which is often interrupted in two parts and in some cases the inner one of them disappeared (just behind the middle and one longitudinal stripe near the apical part of the suture (*murina* ab. *signifera* Weise), and in the case of the last named form the basal and apical longitudinal stripes frequently disappeared.

Head coarsely punctate and finely shagreened throughout, the punctures larger and sparser on the posterior area than on the anterior area, with an irregular and distinct or indistinct elevation on the middle of frons and an obtuse transverse depression on the anterior area of frons; clypeus transverse, strongly ridged on each side and flat on the surface, with front margin emarginated at the middle. Antennæ filiform, somewhat longer than half the length of body, finely pubescent, with 1st segment strongly thickened and somewhat curved, 2nd shortest, 3rd to 5th slender and the 4th rather longer than the 3rd or 5th, 6th to 11th somewhat thickened, subequal in length to each other and pointed at the tip of 11th. Pronotum subcylindrical, slightly triainuate at the front and basal margins, gently rounded on each side; front border weakly ridged and smooth, lateral margins impressed with a sinuous groove which is rather obsolete about the middle, basal margin broadly bordered by the existence of a groove nearly along it, all the angles somewhat tuberculate and bears a distinct setigerous puncture on each tip; dorsum strongly and thickly punctured, with their interspaces finely shagreened and more or less rugose or reticulated. Scutellum longer than wide, gently narrowed posteriorly, rounded at the apex, somewhat convex and finely shagreened on the surface, with some distinct punctures. Elytra much longer than wide, much wider at the base than pronotum, subparallel-sided, narrowed and rounded at the apical part, separately rounded at the apical extremity of each elytron; dorsum convex, with a very faint depression behind the basilar area, strongly and thickly punctate, with their interspaces finely shagreened and strongly rugose, the rugosities with a strong tendency to form longitudinal costæ. Underside: prosternum broad, but not wider than long, somewhat constricted between the fore-coxæ, widened posteriorly, raised at the inter-coxal area, somewhat depressed at the posterior area, with hind margin slightly arched inwardly; proepisterma subtrigonate, with front margin very slightly arched posteriorly; mesosternum subquadrate between the middle-coxæ,

largely rounded at the hind corners and emarginate-depressed at the middle of hind margin; abdomen completely covered by elytra, or a part of the last tergite exposed beyond the apex of elytra, with hind margin of last sternite nearly straight. Legs long, rather robust; femora strongly thickened medially, constricted near the apex, armed with a denticle on the underside beyond the middle; tibiæ thickened terminally, longitudinally ridged and channelled, unarmed the spur, with middle- and hind-pairs distinctly emarginate at the outer side of apical area; tarsi with two basal segments subtrigonate respectively, longitudinally grooved on the middle of each dorsum and the 1st one much longer than the 2nd, 3rd segment deeply bilobed, claw-segment clubate and somewhat curved; claws bifidate.

Male.—Body narrower fore-tibiæ more strongly dilated terminally.

Length.—♂, 4.5 to 6.0 mm; ♀, 6.0 to 7.5 mm.

Local distribution.—Kôtô-syo (Botel-Tobago Is.), Taitô-Tyô (7♂♂ and 6♀♀, March 10 to April 14, 1920, T. Okuni leg.; 8♂♂ and 7♀♀, March and April, 1932, S. Hirayama leg.; 1♂ and 2♀♀, June, 1936, Y. Chûjô leg.).

General distribution.—Philippines (Luzon, Samar, and Babuyanes) and Formosa (Botel-Tobagos).

The present species is a new record from Formosa.

Tribe IV. SCELODONTINI

Scelodontites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 266.
Scelodontitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 67.
Scelodontini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 382.
Adoxini CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 486–491 (pars).

General characters.—Body short, oblong. Head with a deep sulcus on each side above the eyes. Antennæ short, robust, with terminal segments rather thickened. Prothorax short, subcylindrical or subglobular, much narrower than the elytra, with lateral margins obsolete. Elytra somewhat longer than wide. Prosternum broad, subquadrate. Pro-episterna with front margin arched forwardly or convex. Legs robust; femora strongly incrassate and unidentate on each underside; tibiæ entire or emarginate at the apex; claws bifidate.

This group is represented by a single genus *Scelodonta* Westwood in Formosa.

Genus vi. SCELODONTA Westwood

Scelodonta Westwood, Proc. Zool. Soc. London 5 (1837) 129; Baly, Trans. Ent. Soc. London (2) 4 (1867) 155; Chapuis in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 266; Lefèvre, Ann. Soc. Ent. France (5) 7 (1877) 159; Mem. Soc. Roy. Sci. Liége (2) 11 (1885) 67; Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 282; Chen, Sinensia, Acad. Sinica 3 6 (1935) 234, 327–328; l. c. 5–6 11 (1940) 489.

Heteraspis (nec J. Leconte, 1859) Blanchard, Hist. Ins. 2 (1845) 186; Jacoby, Ann. Soc. Ent. Belgique 42 (1898) 186 (Synonymized to *Scelodonta* Westwood).

Odontionopa (nec W. F. Erichson, 1842; nec E. Lefèvre, 1876) Motschulsky, Bull. Soc. Hist. Nat. Moscou 2 39 (1866) 408.

Genotype: *Scelodonta curculionoides* Westwood, Proc. Zool. Soc. London 5 (1837) 129 from Manila in Luzon, Philippines [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 382].

Range: Oriental, Australian and Ethiopian Regions; Manchurian Subregion.

General characters.—Body shortly oblong in general, sometimes ovate or subquadrate, entirely pubescent or the dorsal surface glabrous, generally metallic in coloration.

Head inserted in prothorax up to or near the hind margins of eyes, perdendicularly or obliquely placed to the longitudinal axis of body, very deeply and obliquely sulcate on each side around the inner and hind margins of eye, and the sulci connected to each other by a transverse impression between the frons and clypeus, thus the two latter areas rather distinctly separated to each other; vertex and frons somewhat convex, with a broad and rather deep longitudinal groove in the middle; clypeus rather longer than wide, somewhat widened anteriorly, emarginate or emarginate-depressed at the middle of front margin. Mouth-parts: labrum small, transverse subquadrate, rounded at the front corners, more or less emarginate and finely pubescent at the front margin, flat or slightly convex on the surface, with anterior marginal area more or less depressed or bended downwardly; mandibles robust, strongly incurved, more or less acuminate at the apex followed by an angulation or tooth below it, deeply hollowed at the inner face; maxillary palpi rather robust, strongly thickened terminally, with 1st segment extremely smaller than any one of the three followings, 2nd very slender at the base but strongly thickened at the apical part and somewhat curved, 3rd gently thickened terminally and rather shorter than the 2nd or 4th, 4th nearly conical with

apical part very thinly elongate and pointed at the apex; labial palpi rather slender, with 1st segment minute, 2nd clubate and somewhat curved, 3rd nearly elongate-fusiform with apex bluntly pointed. Eyes oval or oblong-oval, with inner margin slightly emarginate, moderately convex on the surface, rather finely facetted. Antennæ about half as long as the body, finely pubescent, with 1st segment strongly incrassate and somewhat curved, 2nd subcylindrical or subglobular and much thicker than the 3rd but thinner than the 7th, 3rd to 6th slender, 7th to 11th somewhat thickened and widened, with apex of the 11th more or less pointed. Pronotum transverse, strongly transversely convex; front margin gently arched forwardly and immarginated at the median part but narrowly bordered on each side, lateral margins strongly rounded and not distinctly bordered, basal margin distinctly bordered and sinuously arched posteriorly, all the corners bears a setigerous puncture on each tip. Scutellum pentagonal. Elytra somewhat longer than wide, much wider at the base than pronotum, more or less narrowed posteriorly, separately rounded at the apex of each elytron; dorsum convex, regularly punctate-striate, with humeri strongly longitudinally raised; elytral epipleura distinct, obliquely placed, gradually narrowed posteriorly, sparsely pubescent. Underside: prosternum subquadrate, somewhat constricted on each side between the fore-coxæ, strongly widened posteriorly, nearly straight at the hind margin; proepisterna with front margin convex and more or less tuberculate or dentate on the outer end; mesosternum subquadrate, weakly constricted on each side between the middle-coxæ, with hind corners rounded and somewhat produced obliquely, hind margin more or less notched at the middle; metasternum very broad but short, with a distinct central longitudinal suture; abdomen simple, with apical half of pygidium exposed beyond the apex of elytra. Legs robust; femora strongly incrassate medially, constricted near the apex, generally unidentate on each underside, tibiæ slender, gently thickened terminally, armed with a pair of spur at the apex of underside, middle- and hind-tibiæ generally more or less emarginate on the outer side at the apical part, but fore-tibiæ entire; tarsi robust, with 1st segment elongate-subtrigonate and much longer than the 2nd which is shortly subtrigonate, 3rd deeply bilobed, claw-segment clubate and somewhat curved; claws bifidate.

Secondary sexual characters not distinct in general, but in the Formosan species the following sexual differences may be seen:

Male.—Abdomen with a few longitudinal ridges on the middle of the three or four basal sternites and clothed with much longer setæ on each side of the median ridged-area than on the lateral areas.

Female.—Abdomen simple, neither ridged nor especially long setigerous.

Key to the species

1. Pronotum strongly transverse elevate-strigose, elytra uneven on the basal area and distinctly concave along the lateral margins; length: 3.8 to 4.2 mm ..... *sauteri* Chûjô

1'. Pronotum weakly transversely elevate-strigose, elytra not uneven on the basal area and the latero-marginal area not concave; length: 3.2 to 4.0 mm ..... *lewisii* Baly

23. SCELODONTA SAUTERI Chûjô.

Scelodonta sauteri CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 29 (Formosa: Fuhosho and Kosempo).

Body broadly oblong; entirely finely shagreened; head, underside and legs clothed with adpressed white or grayish white setæ; pronotum, scutellum and elytra glabrous. General color cupreous; mostly reddish cupreous, with underside dark cupreous or bronzy and face more or less greenish; antennæ with basal segments similarly colored as the body, but the terminal ones black; mouth-parts black; with apices of mandibles and some parts of palpi dark yellowish brown; tarsi black; claws with basal half black and apical half reddish brown.

Head with one oblique very deep sulcus on each side as usual and the sulci connected to each other by a distinct transverse groove between the front and clypeus; the area surrounded by the above mentioned sulci and groove somewhat convex, deeply and rather thickly impressed with large punctures, the punctuation thicker posteriorly, with a longitudinal groove on the middle of anterior area; the areas between the sulci and eyes very sparsely impressed with rather obtuse punctures; clypeus strongly widened anteriorly, lightly convex and punctured like on the median area of frons, with anterior marginal area somewhat produced anteriorly in a transverse lobe separate from the main part by its different angles, with anterior margin emarginate-depressed. Antennæ about half as long as the body, finely and thickly (the terminal segments) or sparsely (the basal segments)

pubescent, sparsely mixed with some very long pubescence on each, basal one or two segments clothed with setæ as on the face instead of the fine pubescence as on the terminal segments; 1st segment strongly incrassate and very strongly convex in one side but slightly concave on the opposite side, 2nd nearly equal in shape but very much thinner and shorter than the 1st and rather shorter than the 3rd but longer than, or nearly equilength to, the 6th, 3rd to 6th slender, flat, gently widened terminally in each and the rough order of their length as follows: 4>3≒5>6 or 3≒5≒4>6, 7th to 11th, somewhat thickened and distinctly dilated, 7th to 10th subtrigonate respectively and nearly equal in size to each other, 11th oblong in outline and bluntly pointed at the apex. Pronotum much wider than long, strongly rounded on each side which is obsoletely ridged; front margin gently arched forwardly and narrowly bordered (the border distinct on each side but obsolete at the median part), basal margin sinuously arched posteriorly and widely bordered, all the corners with a distinct setigerous puncture; dorsum very strongly transversely convex, but the median area nearly flat, strongly transversely elevate-strigose and punctured between the striæ which are obsolete on the medio-apical area and also a narrow longitudinal area behind the middle. Scutellum pentagonal, rather wider than long, gently narrowed posteriorly, somewhat constricted on each side; dorsum slightly convex, rather sparsely punctate and finely shagreened, with posterior marginal area impunctate, unshagreened and smooth. Elytra distinctly longer than wide, much wider at the base than pronotum, somewhat narrowed posteriorly, rounded at the apex, rather sharply rounded at the apex of each elytron; dorsum convex, each elytron with a shallow transverse depression just behind the basilar space and also a rather deep depression just behind the humeral callus touching to the lateral margin, somewhat transversely wrinkled behind the basilar and humeral areas, thickly clothed with two kinds (larger and smaller) of punctures, the larger punctures arranged in eleven regular longitudinal rows (including a short scutellar and an external marginal row) and the smaller ones arranged in one or two rather irregular rows between the rows of larger punctures, together with the space between the sutural margin and the rows of larger punctures, the smaller punctures become very large on the inner space of basilar area and thus the punctuation on this area especially coarse and thick, on the other hand the smaller punctures bear

a very fine pubescence in each on the lateral and apcial areas; humeri strongly longitudinally raised and free from the larger punctures but rather thickly clothed with smaller punctures; the latero-marginal area of each elytron distinctly concave and the pre-apical area also concave. Underside coarsely and thickly punctured; prosternum rather wider than long, widened posteriorly, somewhat constricted on each side between the fore-coxæ, a little produced latero-posteriorly at the hind corners, nearly straight at the hind margin, coarsely and rugosely punctate on the surface; pro-episterna with front margin somewhat convex and denticulated; abdomen with last sternite gently emarginate at the apical margin; femora armed with a denticle at (fore-femora) or beyond (middle- and hind-femora) the middle of underside; middle- and hind-tibiæ notched at the outer side at the apical part; claws bifidate.

Length.—♂, 3.8 mm; ♀, 4.2 mm.

Local distribution.—Fuhosho and Kosempo (after M. Chûjô, 1938).

General distribution.—Formosa.

24. SCELODONTA LEWISII Baly.

Scelodonta Lewisii BALY, Trans. Ent. Soc. London (1874) 165 (Japan: Nagasaki; China: Chusan and Shanghai); LEFÈVRE, Ann. Soc. Ent. France (5) 7 (1877) 163 (Japan: Nagasaki); LEWIS, Cat. Col. Japanese Archipel. (1879) 28 (Japan); CHÛJÔ, Bull. Tonoku Ent. Soc. 3 2 (1950) 28 (Japan).

Scelodonta Lewisii GEMMINGER et HAROLD, Col. Cat. 11 (1874) 3374 (Nagasaki); SCHÖNFELDT, Cat. Col. Japan (1887) 146 (Japan: Nagasaki); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 67 (Nagasaki, Chusan, and Shanghai); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1267 (Japan and China).

Scelodonta lewise JACOBY, Proc. Zool. Soc. London (1885) 753 (Japan); CHEN, Sinensia, Acad. Sinica 3 6 (1935) 328–329, *f. 25* (China: Shanghai, Chusan, Kiangsi, and Kweichow); CHÛJÔ, Bull. Umeno Ent. Lab. 2 (1935) 14 (Japan: Kurume in Kyusyu); Ho in WU, Cat. Ins. Sinensium 3 (1937) 810 (China: Chusan, Shanghai, Kiangsi, and Kweichow); CHÛJÔ, Mushi, Fukuoka Ent. Soc. 2 11 (1938) 162–163 (China: Laoshan, near Tsingtau in Shantung); Kontyû, Ent. Soc. Nippon 2 14 (1940) 77 (Japan: Kodakusa in Koti-Si, Sikoku).

Scelodonta Lewisii CHÛJÔ, Mushi, Fukuoka Ent. Soc. 2 14 (1942) 57 (Kwantung-Province: Hill Midori-yama and Ryosuizi).

Scelodonta orientales LEFÈVRE, Ann. Soc. Ent. France Bull. (6) 7 (1887) 56 (China: Tché-Kiang); FAIRMAIRE, Ann. Soc. Ent. Belgique 32 (1888) 38 (China: Tché-Kiang); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 68 (China: Tsche-Kiang); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1267 (China); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 811 (China: Tsche-Kiang).

Body shortly oblong, entirely finely shagreened, the shagreen-structure well developed on the head, but not so well on the others; pronotum, scutellum and elytra glabrous, but the other areas clothed with adpressed white setæ. General coloration æneous, sometimes slightly greenish, sometimes cupreous or reddish cupreous; in other cases the general-coloration blue, slightly metallic and slightly tinged with green (this form was named by E. Lefèvre as *orientalis*, but is quite identical in structure); antennæ with basal segments similarly colored as the body, but the terminal ones blackish; mouth-parts piceous to black, with apices of mandibles pitchy red and some parts of palpi dark yellowish brown; tarsi black; claws with basal half black and apical half yellowish brown to reddish brown.

Head with a very deep oblique sulcus on each side as usual; vertex and frons somewhat convex between the lateral sulci, coarsely punctate, the punctures rather thicker posteriorly, with a distinct central longitudinal groove on the middle of frons; clypeus rather longer than wide, separated from frons by an obtuse or rather distinct transverse impression which is arched or angulate posteriorly or straight, somewhat widened anteriorly, distinctly emarginate-depressed at the middle of front margin, somewhat depressed behind the anterior marginal area, more or less, transversely wrinkled on the surface. Antennæ about half or scarsely longer than half, as long as body, with 1st segment sparsely clothed with whitish setæ as on the face, 2nd finely but sparsely pubescent mixed with a few whitish setæ in many cases, 3rd to 6th sparsely pubescent, 7th to 11th very thickly pubescent, and all of these segments sparsely clothed with a few much longer pubescence; 1st segment strongly incrassate and distinctly convex toward the one side but gently concave on the opposite side, 2nd subconical and very much smaller than the 1st, 3rd to 6th most slender, flat, gently widened terminally in each and the rough order of their length as follows: 4>3>5>6 or 4=3>5>6, or 4>3=5>6, 7th to 10 rather thickened, distinctly dilated in each and nearly equal in size to each other, 11th nearly fusiform in outline and nearly equal in thickness to, but much longer than, the 10th. Pronotum much wider than long; strongly rounded on each side; front margin gently arched forwardly and immarginated at the median area but narrowly bordered on each side, lateral margins obsolete, basal margin distinctly bordered and sinuously arched posteriorly,

all the corners bears a distinct setigerous puncture; dorsum transversely convex, the convexity very strong on each side but very weak on the middle, strongly and thickly punctate, interspaces of these punctures, more particularly on the sides and base, transversely elevate-strigose, and impressed with a few strong punctures on the surface, interspaces of these punctures finely shagreened with apical marginal area smooth. Elytra somewhat longer than wide, much wider at the base than pronotum, narrowed posteriorly, rounded at the apex, with apical extremity of each elytron sharply rounded; dorsum convex, each elytron with a shallow transverse depression (which is weakly transversely wrinkled in some cases) behind the basilar area and a distinct depression just behind the humeral calus touched to the lateral margin and eleven longitudinal rows or larger punctures (including a short scutellar and an external marginal row), interstices of these rows of larger punctures, together with the area between the sutural margin and the row of larger punctures, also impressed with a rather irregular row of smaller punctures (which bears a very fine pubescence in each on the lateral and apical areas) and almost flat but more or less convex on the apical area; humeri strongly longitudinally raised, free from the larger punctures but impressed one or two rows of smaller punctures. Underside rather strongly and thickly punctured; prosternum rather longer than wide, somewhat constricted on each side between the fore-coxæ, distinctly widened posteriorly, nearly straight at the hind margin, coarsely rugosely punctate on the surface; pro-episterna with front margin somewhat denticulate downwardly; abdomen with last sternite deeply emarginate at the hind margin; all the femora armed with a denticle at (fore-femora) or beyond (middle- and hind-femora) the middle of underside; middle- and hind-tibiæ emarginate on the outer side at the apical area, but fore-tibiæ entire; claws bifidate.

Length.—♂, 3.2 to 3.5 mm; ♀, 3.5 to 4.0 mm.

Local distribution.—Kôtô-syo (Botel-Tobago Is.) Taitô-Tyô (1♀, July 31, 1908, T. Shiraki leg.; 1♂, March 10 to April 15, 1920, T. Okuni leg.); Musya, Nôkô-Gun, Taityû-Syû (1♂, May 8 to June 15, 1919, T. Okuni leg.); Karenkô, Karenkô-Tyô (1♂, July 20 to August 4, 1919, Okuni leg.); Taihoku, Taihoku-Syû (1♂ and 1♀, June 12, 1932, M. Chûjô leg.); Hakurei in Mt. Taiheizan, Taihoku-Syû (1♀, May 10, 1912, A. Tanaka leg.).

General distribution.—Japan, Formosa (including Botel-Tobago Is.), Kwantung Province, and China.

This species is a new record from Formosa.

Tribe V. TRICHOCHRYSEINI

Heterespites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 282.

Heteraspitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 82.

Heteraspini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 387.

Trichochryseini CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 82 (nom. nud.).

Adoxini CHEN, Sinensia Acad. Sinica 5–6 11 (1940) 486–491 (pars).

General characters.—Body entirely pubescent, generally metallic in coloration. Head deeply engaged in prothorax, placed perpendicularly to the longitudinal axis of body, invisible or hardly visible from above. Pronotum subquadrate, strongly transversely convex, with distinct lateral margins. Elytra elongate-subquadrate, much wider at base than pronotum, narrowed and rounded at the apex, strongly convex on the dorsum. Proepisterna with front margin arched posteriorly. Middle-tibiæ emarginated on the outer side near the apex. Claws bifidate.

This tribe includes five genera and are distributed in the Old World (mainly the Oriental Region) only. The genus *Trichochrysea* Baly is the most dominant group in the tribe and it is present in the fauna of Formosa.

Genus vii. TRICHOCHRYSEA Baly

Trichochrysea BALY, Jour. Ent. 1 (1861) 195; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 387–388; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 235–335; l. c. 5–6 11 (1940) 490.

Bromius BALY, Journ. Ent. 2 (1865) 439 Trans. Ent. Soc. London (2) 4 (1867) 96.

Heteraspis CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 284; LEFÈVRE, Ann. Soc. Ent. France (5) 7 (1877) 309; Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 83; JACOBY, Ann. Soc. Ent. Belgique 42 (1898) 186–187 (Synonymized to *Trichochrysea* Baly).

Genotype: *Trichochrysea mouhoti* BALY, Jour. Ent. 1 (1860) 196 from Cambodia [Fixed by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 387].

Range: Oriental Region: Manchurian and Austro-Malayan Subregions.

General characters.—Body generally massive, broadly subquadrate, sometimes ovate or oblong; dorsal surface, together with face and legs, clothed with more or less strong erect or suberect hairs, but underside usually with rather shorter hairs.

Head more or less deeply inserted in prothorax, perpendicularly placed to the longitudinal axis of body, scarcely visible or invisible from above; vertex somewhat convex, face almost flat and not sulcate above the eyes, supra-antennal areas somewhat convex and smooth, clypeus not delimited from frons and with front margin widely emarginated. Mouth-parts: labrum transverse subquadrate, paralled-sided or rather narrowed anteriorly, rounded and sparsely pubescent at the front corners, gently rounded at the front margin, flat on the surface with anterior area distinctly bended oblique-downwardly; mandibles robust, strongly arched inwardly, acuminated or bluntly pointed at the apex, deeply hollowed at the inner face with a large angulation on the middle of the upper margin and a distinct tooth on a little behind the apex of the lower margin; maxillary palpi robust, with 1st segment extremely smaller than any one of the three succeedings, 2nd very strongly thickened terminally, 3rd somewhat widened terminally and much shorter than the 2nd or 4th, 4th very strongly elongate oval with apex truncated; labial palpi also robust, with 1st segment minute, 2nd clubate, 3rd strongly elongate oblong, somewhat compressed and truncated at the apex. Eyes placed on each side of the face, strongly convex, shortly reniform, with inner margin slightly emarginated. Antennæ either slender and filiform or with five terminal segments more or less strongly dilated and flattened, in any case the 1st segment strongly dilated and somewhat curved. Pronotum subquadrate, strongly transversely convex and very thickly punctate on the dorsum; front margin immarginated, front corners nearly 90° in angulation and bears a large setigerous puncture on each, lateral margins completely or incompletely ridged, basal corners larger than 90° in angulation and bears a large setigerous puncture, basal margin narrowly but distinctly bordered and gently or slightly sinuate. Scutellum more or less narrowed posteriorly, bluntly pointed or broadly rounded at the apex. Elytra subquadrate, longer than wide, much wider than pronotum, more or less narrowed and rounded at the apex, completely covering the abdomen, strongly convex and thickly punctate on the dorsum, with humeri distinctly raised; elytral epipleura oblique, gradually narrowed posteriorly and disappeared near the apex of

elytron. Underside: prosternum subquadrate, somewhat widened posteriorly, nearly straight or slightly emarginated at the hind margin; pro-episterna with front margin arched posteriorly; mesosternum subquadrate between the middle-coxæ, with median portion of hind margin more or less produced posteriorly; metasternum strongly transverse, with a distinct central longitudinal suture and a tubercle near the anterior end of the middle for the reception of a post-tuberance on the middle of the posterior end of mesosternum. Legs rather robust, fairly long; coxæ distinctly separated from each other; femora thickened medially, constricted near the apex and armed with a denticle on each underside or not denticulate; tibiæ slender at the basal half but more or less thickened terminally at the apical, half, with many longitudinal ridges and grooves, without spur, fore- and hind-tibiæ simply strongly dilated at the apical area, but middle-tibiæ distinctly emarginated on the outer side near the apex; tarsi broad, with 1st segment subtrigonate, 2nd strongly widened terminally and shorter than the 1st, 3rd very deeply bilobed, claw-segment clubate and somewhat curved; claws bifidate.

25. TRICHOCHRYSEA JAPANA (Motschulsky).

Heteraspis japana MOTSCHULSKY, Etud. Ent. 6 (1857) 37 (Japan); Bull. Soc. Hist. Nat. Moscou 39 (1866) 176 (Japan); GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3379 (Japan); MIWA, Syst. Cat. Formosan Col. (1931) 186 (Formosa: Horisha).

Bromius Japanus BALY, Trans. Ent. Soc. London (1874) 164 (Japan and N. China).

Bromius japanus LEWIS, Cat. Col. Japanese Archipel. (1879) 28 (Japan); JACOBY, Proc. Zool. Soc. London (1885) 753 (Japan).

Adoxus japanus SCHÖNFELDT, Cat. Col. Japan (1887) 146 (Japan); TAKEUCHI, Trans. Kansai Ent. Soc. 2 (1931) 69 (Japan: Is. Yakusima).

Trichochrysea japana CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 83 (Japan); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1269 (Japan); YUASA in Icon. Ins. Japanicorum (1932) 602, *f. 1177* (N. China, Korea, Japan, and Formosa); CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 136–139 25 (1935) 78–79 (Loo-Choo: Naze in Amami-Oshima and Iriomote-jima); CHEN, Sinensia 3 6 (1935) 336, 337–338, *f. 27* (China: Kiangsi and Kweichow); CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 142 25 (1935) 210 (Loo-Choo; Iriomote-jima and Amami-Oshima); MIWA, Trans. Kansai Ent. Soc. 6 (1935) 23, *pl. 3, f. 16* (Loo-Choo; Amami-Oshimo); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 817 (China and Japan); NAKANE, Ent. World 96 10 (1942) 78–79 (Japan: near Lake Noziri-ko).

Body nearly oblong. General color cupreous or cupreo-æneous or æneous, with clypeus, scutellum and elytral suture metallic green or greenish æneous in many cases, sometimes the general color rather reddish cupreous or greenish æneous or æneous green; mouth-parts, three basal segments, of antennæ and claws yellowish brown or reddish brown, with mandibles black and 1st antennal segment and last segment of each palpi more or less infuscated; terminal segments of antennæ, tibiæ and tarsi blackish in general but frequently partly lightened. Head and dorsal surface of body thickly clothed with two sorts of distinct setæ, the one blackish or blackish brown, long, stout and erect, the other silvery, soft, adpressed or suberect, the silvery setæ rather thickly distributed on the head (especially on the clypeus), pronotum and scutellum, but more sparsely on the elytra, except on the apical region and behind the middle where they are arranged in a ‾V‾-shaped transverse band; underside thickly clothed with erect or suberect silvery robust hairs, legs clothed with silvery and blackish brown or blackish robust hairs.

Head distinctly or indistinctly shagreened, or unshagreened; vertex somewhat convex, thickly rugose-punctate; frons flat, strongly rugose-punctate, with a short or long irregular longitudinal smooth area on the middle; supra-antennal areas somewhat raised, impunctate and smooth; clypeus not distinctly deliminated from behind, strongly and rather rugosely punctate, with anterior marginal area depressed and impunctate and front margin broadly emarginated. Antennæ rather slender, rather longer or shorter than half the length of body, with 1st segment strongly incrassate and somewhat curved, 2nd rather thicker but slightly shorter than the 3rd and somewhat curved, 3rd to 6th slender and the order of their length as folows: $4>3\fallingdotseq5>6$, 7th to 11th somewhat thickened and the order of their length as follows: $11>7>9>10>8$, with apex of 11th bluntly pointed. Pronotum subquadrate, rather wider than long, somewhat narrower at the base than the anterior end; lateral margins completely ridged, basal margin narrowly but distinctly bordered with median area gently arched posteriorly; dorsum very strongly transversely convex, with a distinct tubercle on either side near the front angle, very thickly punctate throughout, the punctures very large and deep and the size variable, interspaces of these punctures rugose and generally finely shagreened in the Formosan examples. Scutellum nearly

obtrigonate, with lateral margins more or less rounded; dorsum gently convex, finely shagreened, thickly punctulate, covered with silvery adpressed setæ, without blackish erect setæ. Elytra elongate-subquadrate, much wider at the base than pronotum, narrowed and rounded at the apex, entirely covering the abdomen; dorsum strongly convex with a light depression just behind the scutellum, very strongly and thickly punctate, the punctures partly showing a tendency towards irregular arrangement, interspaces of these punctures finely but sparsely punctulate partially. Underside thickly punctate, pro- and mesosternum rather rugosely punctate and more or less depressed medially. Legs rather robust, fairly long; femora armed with a denticle on each underside more or less beyond the middle, middle-tibiæ emarginated on each outer side near the apex as usual.

Male.—Clypeus slightly wider than long, antennæ rather longer than half the length of body, prosternum longer than wide, mesosternum not or slightly wider than long, last abdominal sternite with apical margin narrowly straight.

Female.—Clypeus much wider than long, antennæ rather shorter than half the length of body, pro- and mesosternum much wider than long, last abdominal sternite with apical margin widely and gently emarginated.

Length.—♂, 5.5 to 6.0 mm; ♀, 6.5 to 7.5 mm.

Local distribution.—Mt. Sô-zan, Sitisei-Gun, Taihoku-Syû (1♀, April 30, 1933, M. Chûjô leg.; 1♂, May 24, 1936, M. Chûjô leg.; 2♂♂ and 1♀, April 18, 1937, M. Chûjô leg.; 1♂ and 1♀, April 2, 1939, K. Endo leg.; 1♂, March 29, 1940, R. Matuda leg.); Bandai-Sya, Nôkô-Gun, Taityû-Syû (2♂♂ and 1♀, July 5, 1938, K. Kodaira leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1♀, April 4, 1940, R. Matuda leg.); Mt. Rarasan, Bunzan-Gun, Taihoku-Syû (1♀, April 4, 1940, M. Chûjô leg.); Mt. Arisan, Tainan-Syû (1♂, May 10, 1940, M. Chûjô leg.).

Horisha (after Y. Miwa, 1931).

General distribution.—Japan, Loo-Choo, Formosa, Korea, and China.

Tribe VI. LYPESTHINI

Leprotites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 268.

Leprotitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 71.

Leprotini JACOBY, Fauma Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 395.

Adoxini CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 486–49 (pars).

General characters.—Body entirely pubescent or covered with scales and simple rigid hairs, mostly of sombre coloration and never metallic. Head deeply engaged in prothorax, hardly visible or invisible from above, perpendicularly placed to the longitudinal axis of body. Pronotum subquadrate, strongly transversely convex, with lateral margins not bordered in many cases, but sometimes incompletely or completely bordered. Elytra subquadrate, much wider at the base than pronotum, narrowed and rounded at the apex. Prosternum comparatively narrow; pro-episterna with front margin arched inwardly. Legs rather slender, fairly long, with tibiæ nearly always entire and claws bifidate.

This group contains about 30 genera, of which the 5 ones having a relation to our Formosan fauna and are separated as follows:

Key to the genera

a. Middle-tibiæ, or sometimes the hind ones also, more or less emarginate or sinuate on the outer side either near or at the apex. ..... (b)
a'. Middle- and hind-tibiæ neither emarginate nor sinuate as in above (c)
b. Mesosternum strongly produced posteriorly in the middle, femora very strongly incrassate medially and very strongly dilated into a large tooth on each underside, but the middle-pair markedly thinner than the others ..... *Pseudometaxis* Jacoby
b'. Mesosternum not strongly produced posteriorly in the middle, femora moderately incrassate and not so strongly toothed as in above. *Demotina* Baly
c. Femora rather strongly toothed beneath ..... *Lypesthes* Baly
c'. Femora unarmed ..... (d)
d. Mesosternum not emarginated at the hind margin ..... *Xanthonia* Baly
d'. Mesosternum emarginated at the hind margin ..... *Aoria* Baly

Genus viii. PSEUDOMETAXIS Jacoby

Pseudometaxis Jacoby, Mem. Soc. Ent. Belgique 7 (1900) 101–102; Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 396, 424–425; Pic, Bull. Soc. Zool. France 54 (1929) 140; Chen, Sinensia, Acad. Sinica 3 6 (1935) 235, 347; l c. 5–6 11 (1940) 490.

Genotype: *Pseudometaxis serraticollis* Jacoby, Mem. Soc. Ent. Belgique 7 (1900) 102 from Burma [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 424].

Range: Burma, Indo-China, Sumatra, China, and Formosa.

General characters.—Body generally subquadrate-ovate, sometimes oblong or oblong-ovate, clothed with short scales and generally sparsely furnished with erect pubescence or setæ, but rarely without these latters.

Head well porrect; vertex somewhat convex, not sulcate above the eyes; frons mostly flat, with a faint longitudinal impressed-line on the middle of anterior half, more or less depressed on the anterior area; clypeus subpentagonal, much wider than long, limited from frons by the depression of the anterior area of frons, more or less emarginate at the middle of front margin, gently longitudinally convex on the surface. Mouth-parts; labrum transverse, strongly narrowed anteriorly, rounded at the front corners, more or less emarginate at the middle of front margin, nearly flat on the surface with anterior marginal area bended downwardly or emarginate-depressed and sparsely pubescent-punctate along the anterior border of flat area; mandibles robust, strongly arched inwardly, bidentate at the apex, deeply hollowed at the inner face; maxillary palpi with 1st segment extremely smaller than any one of the three followings, 2nd very slender at the basal part but rather thickened at the apical part and somewhat curved, 3rd rather thickened terminallly and much shorter than the 2nd or 4th, 4th rather robust, gently thinned terminally and distinctly truncated at the apex; labial palpi with 1st segment minute, 2nd slender, clubate and somewhat curved, 3rd rather robust, rather thinned terminally, but narrowed again at the apical part and markedly truncated at the tip. Eyes placed on each side of the face, distinctly distanted from the front margin of pronotum, nearly rotundate-ovate with inner margin slightly emarginate near the root of antenna, very strongly convex on the surface. Antennæ very slender, filiform, somewhat longer than half the length of body, finely pubescent; 1st segment strongly thickened, somewhat curved and clothed with narrow scales, 2nd nearly clubate, rather curved, shortest and clothed with scalelike setæ, 3rd to 5th very slender, 6th to 11th rather thicker than the 5th, with apex of the 11th more or less pointed. Pronotum much wider than long, rather narrowed in front; front margin nearly straight and immarginated, all the angles somewhat tuberculate and bears a long seta on each tip. Lateral margins distinctly rounded and serrate throughout, basal margin gently and slightly sinuate and rather obtusely bordered, dorsum transversely convex with a shallow depression along a little behind the front margin. Scutellum narrowed posteriorly, rounded at the apex. Elytra elongate-subquadrate, much wider at the base than pronotum, more or less widened posteriorly or nearly parallel-sided, narrowed and rounded at the apex, entirely covering the abdomen; dorsum convex, gen-

erally with a shallow transverse depression behind the basal area, very coarsely punctate, the punctures arranged inclose and rather regular or irregular longitudinal rows; humeri distinctly raised, free from the coarse punctures; elytral epipleura narrow obliquely or nearly vertically placed, gradually narrowed posteriorly and disappeared near the latero-apical corner of elytron. Underside: prosternum broad, somewhat constricted between the fore-coxæ, strongly widened posteriorly, nearly straight or slightly emarginate at the hind margin pro-episterna with front margin nearly straight; mesosternum narrower between the middle-coxæ than intercoxal area of pronotum, with hind-margin more or less strongly produced posteriorly in the middle; metasternum very broad, with a distinct central longitudinal suture. Legs moderately long and robust; fore- and hind-femora very strongly thickened medially and dilated into a broad tooth on the underside, middle-femora less strongly thickened and toothed; tibiæ rather slender but gradually thickened terminally with many longitudinal ridges, fore-tibiæ unarmed the spur, but middle- and hind-tibiæ armed with a pair of spur at the apex of underside, middle-tibiæ sligthly emarginate on the outerside near the apex; tarsi with two basal segments subtrigonate and 2nd one longitudinally sulcate on the middle of dorsum, 3rd one deeply bilobed, claw-segment elongate-clubate and somewhat curved; claws distinctly bifidate.

Second sexual character not recognizable.

26. PSEUDOMETAXIS NIGRESCENS sp. nov.

Body nearly oblong-ovate, thickly clothed with middle or grayish white adpressed scales on the whole surface and more or less covered with white powdery excrescence. General color deep black, mouth-parts yellowish brown, with mandibles dark reddish brown to piceous or black; antennæ black, with three basal segments yellowish brown, but the upper surface of the 1st segment and the median part of the 3rd one more or less infuscated; class reddish brown.

Head finely shagreened throughout, strongly reticulate-punctate on the vertex and frons, with a central longitudinal impression or inpressed-line on the frons, more or less distinctly depressed at just behind the clypeus; clypeus subpentagonal, wider than long, gently emarginate at the front margin, somewhat longitudinally convex on the surface, simply sparsely punctate, sparsely grayish pubescent with whitish narrow scales or scalelike setæ on the basal area. Antennæ slender, filiform,

rather longer than half the length of body, with 1st segment strongly thickened and somewhat curved, 2nd nearly clubate, somewhat curved and shortest, these two basal segments clothed with narrow scales or scalelike setæ on the basal area of each upper side, but the remaining nine segments simply finely pubescent, 3rd to 5th very slender, 6th to 11th rather thickened with apex of the 11th bluntly pointed, the rough order of their length as follows: 4>1>11>5>7>6>3>8≒9≒10>2, and also the rough order of their thickness as follows: 1>11>10≒9≒8>7>6>2>5>4>3. Pronotum rather more than one and a half times as wide as it is long, somewhat narrower at the apical end than the base, distinctly rounded and serrate on each side; dorsum transversely convex, with a broad but shallow depression along a little behind the front margin, strongly reticulate-punctate throughout. Scutellum somewhat narrowed posteriorly, rounded at the apex, coarsely punctate or roughly sculptured on the surface. Elytra elongate-subquadrate, much wider at the base than pronotum, gently widened posteriorly, rounded at the apex; dorsum convex, with a shallow transverse depression on a little behind the base, very coarsely punctate, the punctures arranged inclose and rather regular longitudinal rows; humeri distinctly convex, free from the large straited punctures, but with some smaller punctures. Underside: prosternum very broad, but not wider than long somewhat constricted between the fore-coxæ, strongly widened posteriorly, nearly straight at the hind margin, distinctly depressed behind the front margin and also just behind the middle, coarsely punctate; pro-episterna with front margin very slightly arched posteriorly; mesosternum distinctly narrower between the middle-coxæ than the inter-coxal area of prosternum, strongly produced posteriorly at the middle of posterior edge, deeply longitudinally depressed on the surface from the middle to the posterior end, coarsely punctate. Legs so structured as in the generic description.

Length.—♂, 4.5 mm; ♀, 5.5 mm.

Local distribution.—Kôsyun, Kôsyun-Gun, Takao-Syû (1♂, **Holotype**, April 25 to May 25, 1918, J. Sonan leg.); Kusukusu, Kosyun-Gun, Takao-Syû (1♀, **Allotype**, June 17, 1937, M. Chûjô leg.).

General distribution.—Formosa.

This new species is nearly related to *Pseudometaxis niger* Chen from Kweichow in China, but may distinctly be distinguished

from it by the elytra uniformly clothed with adpressed scales and without erect hairs, the pronotum distinctly serrate on each side and the legs (excepted the claws) entirely deep black.

Genus ix. DEMOTINA Baly

Demotina BALY, Journ. Ent. 2 (1863) 158; Trans. Ent. Soc. London 2 4 (1867) 84; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 281; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 80; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 396, 427; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 235, 351; l. c. 5–6 11 (1940) 490.

Genotype: *Demotina bowringi* BALY, Journ. Ent. (1863) 159 from Hongkong in China [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 427].

Range: Oriental Region; Manchurian and Austro-Malayan Subregions.

General characters.—Body oblong or oblong-ovate or subquadrate-ovate, more or less thickly clothed with adpressed scales on the whole surface and sometimes irregularly intermixed with setæ or scalelike setæ between the true scales, underside frequently clothed with scalelike setæ or true setæ only.

Head moderately exserted, obliquely or perpendicularly placed to the longitudinal axis of body, not sulcated above the eyes, with a central longitudinal groove on the frons, the latter more or less depressed on the middle of the anterior area; clypeus transverse, rather widened in front or nearly parallel-sided separated from behind by the depression of the anterior area of frons, emarginated at the middle of front margin, frequently not clothed with scales but more or less pubescent on the surface. Mouth-parts: labrum transverse, rather narrowed anteriorly, rounded at the front corners, slightly arched inwardly or forwardly at front margin, nearly flat on the surface but the anterior marginal area more or less depressed or depressed-emarginated, with a transverse row of large setigerous punctures nearly along the front margin of the basal flat area; mandibles robust, strongly arched inwardly, bidentate at the apex, deeply hollowed at the inner face; maxillary palpi with 1st segment very much smaller than any one of the three succeedings, 2nd slender with apical part rather thickened and somewhat curved, 3rd rather thickened terminally and distinctly shorter than the 2nd or 4th, 4th longest, thinned terminally and distinctly truncated at the apex; labial palpi with 1st segment minute, 2nd clubate but slender and somewhat curved, 3rd largest and nearly

elongate-oblong with very distinctly truncated. Eyes placed on each side of the face, small nearly rotundate-ovate, not emarginated at the inner margin, strongly convex and coarsely facetted. Antennæ either slender and filiform or rather more robust and subfiliform, about half or rather more than half as long as body, finely pubescent; 1st segment always strongly thickened and somewhat curved, 2nd generally shortest but thicker than the 3rd, the latter and the three followings most slender, the five terminal segments more or less thickened with apex of the 11th pointed. Pronotum more or less transverse, rounded on each side; front and basal margins narrowly bordered or immarginated and tuberculated at each lateral extremity bearing a long seta on the tip, lateral margins either obsolete or serrate; dorsum transversely convex, with a broad but shallow depression along a little behind the front margin. Scutellum more or less narrowed posteriorly, with apex gently rounded or triangulated. Elytra elongate-subquadrate, more or less wider at the base than pronotum, generally a little widened posteriorly, rounded at the apex, completely covering the abdomen; dorsum convex, with basal area either strongly or rather indistinctly raised; coarsely punctate, the punctures closely arranging in irregular longitudinal rows; humeri distinctly raised, free from the coarse punctures; elytra epipleura oblique or nearly vertically placed, narrow but distinct from the base to near the apex and gradually narrowed posteriorly. Underside. prosternum broad, somewhat constricted between the fore-coxæ, widened posteriorly, nearly straight at the hind margin; pro-episterna with front margin nearly straight or slightly arched posteriorly; mesosternum much narrower between the middle-coxæ than the intercoxal area of prosternum, with posterior marginal area distinctly emarginate-depressed and not distinctly produced posteriorly at the middle; metasternum strongly transverse, with a distinct central longitudinal suture. Legs moderately long and robust; femora strongly thickened medially, constricted near the apex and armed with a distinct tooth at or beyond the middle of underside, rarely unarmed, the middle-femora frequently rather thinner than the fore- or hind-femora; tibiæ rather slender, gently thickened terminally, longitudinally ridged, armed with a pair of spur at the apex of the underside of middle- and hind-tibiæ, these two latters or one pair of them notched or slightly sinuate on the outer side near the apex; tarsi with two basal segments trigonate and the 2nd one longitudinally sulcate on the

middle of dorsum, 3rd one deeply bilobed, claw-segment clubate and somewhat curved; claws distinctly bifidate.

Secondary sexual characters generally indistinct, but rarely distinct as in *Demotina alni* sp. nov. from Formosa described in the present paper.

Key to the species

1. Dorsal surface of the body clothed with scales only ..... (2)
1'. Dorsal surface of the body clothed with scales and setæ or scalelike setæ; elytra very much wider than pronotum; femora moderately thickened ..... (3)
2. Body larger, 3.5 mm (♂) in length elytra not very much wider than pronotum; femora very strongly dilated and armed with a very large tooth on each underside ..... *taiwana* sp. nov.
2'. Body smaller, 2.50 to 2.75 mm (♂ ♀) in length; elytra rather markedly wider than pronotum femora moderately incrassate and armed with a minute denticle on each underside ..... *decoratella* sp. nov.
3. Last abdominal sternite flat on the middle with apical margin nearly straight in the male, but in the female the medio-apical area distinctly raised like a hump and the apical margin emarginated; femora minutely unindenticulate beneath, tibiæ slender and thickened terminally; length (♂ ♀): 2.9 to 3.5 mm ..... *alni* sp. nov.
3'. Last abdominal sternite simple in both sexes, without distinct sexual differences between them; femora unarmed beneath, tibiæ robust and strongly dilated at the apical part; length (♂ ♀): 3.25 to 4.25 mm ..... *montana* sp. nov.

27. DEMOTINA TAIWANA sp. nov.

Body rather broadly oblong-ovate, thickly clothed with narrow and adpressed scales. General color chestnut brown, with head rather lighter, pronotum and elytra infuscated, mandibles dark or deep reddish brown with apices black, labrum, palpi, basal segments of antennæ, basal halves of femora and apical portions of tibiæ rather yellowish brown.

Head finely shagreened throughout; vertex and frons reticulate-punctate, thickly clothed with pale yellowish scales; clypeus transverse, somewhat widened anteriorly, obscurely separated from frons by a shallow depression, somewhat emarginated at the middle of front margin, lightly longitudinally convex on the surface, sparsely punctate, the punctures including a whitish scalelike seta in each. Antennæ filiform, rather longer than half the length of body, finely pubescent; 1st segment somewhat incrassate, rather curved and clothed with whitish scalelike setæ, and nearly clubate and shortest, 3rd to 6th slender, 7th to 11th somewhat thickened terminally, with apex of the 11th bluntly pointed, and the rough order of their length as follows: 11≒7>

1≒4>5≒8≒9≒10>6≒3>2. Pronotum transverse, about twice as wide as it is long, widest at a little before the base and distinctly narrowed from there to anteriorly and posteriorly with serrate lateral margins; dorsum transversely convex, with a broad but shallow depression along a little behind the front margin, finely and faintly shagreened and reticulate-punctate throughout, thickly clothed with pale brownish scales which are more paler on the lateral areas than on the middle. Scutellum somewhat narrowed posteriorly, rounded at the apex, lightly convex and roughly structured on the surface, thickly clothed with pale yellowish or dirty whitish scales. Elytra elongate-subquadrate, wider at the base than pronotum, narrowed and rounded at the apex; dorsum convex, with post-basal area somewhat raised, the raised area bounded at sides and behind by a common depression, sutural area shallowly longitudinally depressed near the apex and latero-apical area also distinctly depressed nearly along the latero-apical margin, coarsely punctured and the punctures thickly arranging in rather regular longitudinal rows, thickly covered with scales which are mostly pale brownish or pale yellowish in colorations, but a group spreading from the latero-basal area to the middle of elytron more or less whitish. Underside: prosternum somewhat constricted between the fore-coxæ, strongly widened posteriorly, nearly straight at the hind margin, coarsely and sparsely punctate, sparsely clothed with long and robust whitish setæ; pro-episterna with front margin slightly arched posteriorly; mesosternum subquadrate between the middle-coxæ, with hind margin somewhat emarginated on each side of the middle, punctate and setigerous as on the prosternum, with a longitudinal impression on the medio-posterior area. Legs: femora very strongly incrassate medially and very strongly triangularly unidentate on each underside, with middle-femora somewhat thinner than the fore- and hind-femora, middle-tibiæ very slightly notched on the outer side at the apex, claws bifidate.

Length.—♂, 3.5 mm.

Local distribution.—Taataka (altitude about 2,850 meters), between Mts. Ari-san and Niitaka-yama, Tainan-Syû (1♂, **Holotype**, May 27, 1933, M. Chûjô leg.)

General distribution.—Formosa.

The present new species is somewhat allied to *Demotina fasciculata* Baly from Japan, but may be distinguished from it by the dorsal surface not intermixed with setæ or pubescence be-

tween the scales, comparative width of the pronotum to the elytra much larger, the femora very much thicker and bears very much larger tooth on each underside.

28. DEMOTINA DECORATELLA sp. nov.

Body oblong-ovate, thickly clothed with whitish or pale yellowish scales, the scales on the lateral areas of underside and legs much narrower than those on the dorsum, median area of the underside not clothed with scales but pubescent. General color deep or dark yellowish brown, partly more infuscated, with antennæ and mouth-parts paler, but the mandibles with the general color and distinctly infuscated at the apical part; elytra with irregular piceous or black markings which are separately settled or connected.

Head finely shagreened throughout, rather irregularly reticulated on the vertex and frons, with a faint central longitudinal sulcus on the frons, the latter flat or very slightly depressed at the medio-anterior area; clypeus transverse-subquadrate, separated from behind by an arched depression; widened in front, somewhat emarginated at the middle of front margin, gently longitudinally convex, neither reticulate nor clothed with scales but rather sparsely pubescent-punctate. Antennæ slender, filiform, about half or rather more than half as long as body; 1st segment distinctly thickened and somewhat curved, 2nd subcylindrical and slightly thinned terminally, 3rd to 6th slender, 7th to 11th thickened terminally, with apex of the 11th pointed, and the rough order of their length as follows: $4>11\fallingdotseq1>7\fallingdotseq8>$ $9>10>5>2>3>6$. Pronotum nearly twice as wide as it is long strongly rounded and serrate on each side; dorsum transversely convex, with median area almost flat and an excurved shallow depression behind the front margin, rather irregularly reticulate-punctate throughout. Scutellum nearly obpentagonal, rather narrowed posteriorly and somewhat longer than wide, not strongly and sparsely punctate on the surface. Elytra elongate-subquadrate, much wider at the base than pronotum, gently widened posteriorly, rounded at the apex, entirely covering the abdomen; dorsum convex, with a transverse depression behind the basal area, distinctly depressed just behind the scutellum, coarsely punctate, the punctures partly arranging in rather irregular longitudinal rows. Underside as in the generic description. Legs: femora moderately incrassate with a minute denticle on each underside, middle-femora rather thinner than the fore- and hind-femora; middle-tibiæ slightly notched on the outer side near the apex, but the hind-tibiæ not notched; claws bifidate.

Length.—♂, 2.50 to 2.75 mm; ♀, 2.75 mm.

Local distribution.—Bakurasu (altitude about 600 meters), Niitaka-Gun, Taityû-Syû (1 ♂, **Paratype**, April 14, 1910, I. Nitobe leg.); Hokutô, Sitisei-Gun, Taihoku-Syû (1 ♂, **Paratype**, March, 1912; H. Sauter leg.); Sintiku, Sintiku-Syû (2 ♂ ♂ and 2 ♀ ♀, **Paratype**, July 1 to 30, 1918, J. Sonan leg.); Rimogan (altitude about 460 meters), Bunzan-Gun, Taihoku-Syû (1 ♂, **Holotype** and 1 ♀, **Allotype**, April 5, 1940, M. Chûjô leg.).

General distribution.—Formosa.

The present new species is most nearly related to *Demotina decorata* Baly from Japan, but differs from it by the body much larger and more elongate, the dorsal surface of pronotum not so strongly reticulated and of elytra not so strongly punctured, the antennæ more slender and with the 3rd to 6th segments more narrowly elongate, etc.

Demotina decorata from Fuhosho, Formosa in my previous paper [Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 31] belongs to the present new species.

29. DEMOTINA ALNI sp. nov.

Body nearly oblong; dorsal surface thickly covered with grayish white, narrow and adpressed scales, intermixed with grayish white adpressed setæ or scalelike setæ; underside and legs finely grayish pubescent, with some whitish adpressed and narrow scales on the lateral areas of thorax and dorsal surfaces of hind-femora. General color chestnut brown, with some blackish irregular patches on the dorsum, terminal segments of antennæ more or less infuscated, apices of mandibles black, metathorax and abdomen often piceous or black, pre-apical part of the dorsal surface of each femora more or less infuscated.

Head: vertex and frons reticulated, with a central longitudinal impressed-line on the mandible of frons; clypeus transverse, separated from frons by a curved transverse depression, distinctly notched at the front margin, flat or very slightly hollowed on the most part of surface which is finely shagreened, thickly pubescent-punctate and neither clothed with scales nor scalelike setæ. Antennæ filiform, about half, or only a little longer than half, as long as body; 1st segment strongly thickened and somewhat curved, 2nd nearly clubate or obconical, 3rd to 6th slender, 7th to 11th distinctly thickened with apex of the 11th bluntly pointed, and the rough order of the length of these segments as follows: 1>11>7≒4>8≒5>9>10>3>6>2. Pronotum

somewhat transverse, but less than one and a half times as wide as it is long, widest at a little before the base and gently narrowed anteriorly from there with a slight curvature but strongly convergent to the basal corners; dorsum transversely convex, with a distinct transverse depression along a little behind the front margin and a small and very shallow depression on each side, serrate on the lateral extremities, strongly reticulate-punctate throughout. Scutellum nearly obpentagonal, strongly narrowed posteriorly, roughly and irregularly sculptured on the surface. Elytra elongate-subquadrate, much wider at the base than pronotum, nearly parallel-sided or very slightly widened posteriorly, narrowed and rounded at the apex, entirely covering the abdomen; dorsum convex, with medio-basal area of each elytron bounded by a broad depression, strongly punctured, the punctures closely arranging in longitudinal rows and including a seta or scalelike seta in each but not bearing the true scale, the latter arising from the interspaces of punctures only and partially very thickly gathering and forming some irregular vittæ. Underside: prosternum much longer than wide, constricted and broadly ridged on each side between the fore-coxæ, very slightly arched posteriorly at the hind margin, depressed on the surface with the exception of the median area, coarsely and rugosely pubescent-punctate; pro-episterna with front margin slightly arched posteriorly; mesosternum subquadrate between the middle-coxæ, more or less notched at the middle of hind margin and rounded on each side, roughly structured on the surface and coarsely pubescent-punctate. Legs: femora moderately thickened medially, distinctly constricted near the apex, armed with a minute denticle on each underside, and the middle-pair rather thinner than the fore- and hind-pairs; tibiæ slender, gently thickened terminally, with apical area of the outer side of two posterior pairs weakly or slightly emarginated; claws appendiculate.

Male.—Pronotum rather less than one and a half times as wide as it is long; prosternum much narrower than of the female; last abdominal sternite flat on the median area, with apical margin nearly straight, but the inner margin of the apical border angularly dilated inwardly at the middle.

Female.—Pronotum rather more than one and a half times as wide as it is long; last abdominal sternite with medio-apical area distinctly convex like a hump which is impunctate and smooth, and apical margin distinctly emarginated at the middle.

Length.—♂, 2.9 mm; ♀, 3.25 to 3.50 mm.

Food-plant.—*Alnus formosana* (Burkill) Makino (Japanese name: *Taiwan-hannoki*).

Local distribution.—Mt. Nôkô (altitude about 2,850 meters), Nôkô-Gun, Taityû-Syû (2 ♀♀, **Paratype**, July 1, 1929, Y. Miwa leg.); Oiwake (altitude about 2,290 meters), Nôkô-Gun, Taityû-Syû (6♀♀, **Paratype**, August 13, 1940, M. Chûjô leg.); Sakuraga-mine (altitude about 2,760 meters), Nôkô-Gun, Taityû-Syû (1♂, **Holotype** and 1♀, **Allotype**, August 13, 1940, M. Chûjô leg.).

General distribution.—Formosa.

This new species is somewhat allied to *Demotina modesta* Baly from Japan, but differs from it by the body narrower, especially the comparative width of pronotum to the elytra smaller and the dorsal surface of the body intermixed with setæ or scalelike setæ besides the original true scales which are much narrower.

30. DEMOTINA MONTANA sp, nov.

Body nearly oblong; dorsal surface thickly clothed with pale yellowish or rather dirty whitish scales, the scales on the head and elytra mixed with setæ or scalelike setæ, the scales on the elytra not arise from the punctures which bears a true pubescence in each; underside finely but not thickly pubescent in general, but the lateral areas of thorax more or less clothed with whitish scales; legs finely pubescent, with the exception of the femora which are clothed with whitish scales and the dorsal or outer faces of tibiæ clothed with scalelike setæ. General color yellowish brown to chestnut brown, with dorsum partially more infuscated, apices of mandibles black, terminal segments of antennæ often infuscated, sometimes the most part of underside and apical parts of femora piceous to black.

Head: vertex and frons reticulate-punctate, with a central longitudinal sulcus on the middle of frons which is shallowly depressed just behind the clypeus; clypeus much wider than long, with front margin emarginated at the middle, surface finely shagreened and rather sparsely pubescent-punctate, not clothed with scales or scalelike setæ. Antennæ filiform, only a little longer than half the length of body; 1st segment distinctly thickened and somewhat curved, 2nd nearly reniform, 3rd to 6th slender and gradually slightly increase their length terminally, 7th to 11th distinctly thickened with apex of the 11th bluntly pointed, and the rough order of the length of these segments as follows: 1≒7≒4>11>3≒5≒8>9>10>6>2. Pronotum,

about one and a half times as wide as it is long, strongly rounded and serrate on each side; dorsum transversely convex, with a broad but not very deep transverse impression along a little behind the front margin and a shallow depression on each side of the middle, strongly reticulate-punctate throughout. Scutellum narrowed posteriorly, rounded at the apex, thickly punctulate and finely shagreened on the surface with apical area lightly depressed. Elytra elongate-subquadrate, much wider than pronotum, slightly widened posteriorly or nearly paralled-sided, narrowed and rounded at the apex, entirely covering the abdomen; dorsum convex, with medio-basal area of each elytron separately convex and bounded by depression, strongly punctured, the punctures closely arranging in longitudinal rows. Underside: prosternum much longer than wide, gently widened posteriorly, nearly straight at the hind margin, with surface uneven, more or less depressed on each, anterior and posterior, portion of the middle, coarsely and sparsely punctate; pro-episterna with front margin nearly straight or very slightly arched posteriorly; mesosternum distinctly emarginated on each side between the middle-coxæ, very strongly emarginate-depressed at the middle of hind margin and rounded on each side of the emargination, finely shagreened and coarsely pubescent-punctate on the surface. Legs robust; femora moderately incrassate with middle-pair rather thinner than the others, distinctly constricted near the apex and unarmed the tooth on the underside; tibiæ robust, with apical part strongly dilated, middle- and hind-pair gently emarginated on the outer side at the apex; claws appendiculate.

Length.—♂, 3.25 to 3.75 mm; ♀, 4.00 to 4.25 mm.

Local distribution.—Tompo (altitude about 1,190 meters), Niitaka-Gun, Taityû-Syû (1♂ and 1♀, **Paratype**, April 10, 1924, T. Shiraki leg.); Rakuraku (altitude about 1,690 meters), Nitaka-Gun, Taityû-Syû (1♀, **Paratype**, April 11, 1924, T. Shiraki leg.); Daisuikutu (altitude about 3,500 meters), Niitaka-Gun, Taityû-Syû (1♂ and 1♀, **Paratype**, June 14, 1924, T. Shiraki leg.); Mt. Ari-san (altitude about 2,270 meters), Tainan-Syû (1♂, **Holotype** and 1♀, **Allotype**, May 25, 1933, M. Chûjô leg.).

General distribution.—Formosa.

The present new species is very easily distinguished from the other known species by the femora not denticulate beneath.

Genus x. LYPESTHES Baly

Lypesthes BALY, Journ. Ent. (1863) 152; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 273; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 74; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 395, 412; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 236, 370–371; l. c. 5–6 11 (1940) 491.

Leprotes BALY, Journ. Ent. 2 (1863) 158; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 273; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 80; JACOBY, Fauna Brit. India. incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 396, 425–426; Sinensia, Acad. Sinica 3 6 (1935) 370–371 (Synonymized to *Lypesthes* Baly).

Talmonus FAIRMAIRE, Ann. Soc. Ent. France (6) 9 (1889) 71; JACOBY, Entomology 323 23 (1890) 115 (Synonymized to *Lypesthes* Baly).

Genotype: *Lypesthes ater* (Motschulsky), Etud. Ent. 9 (1860) 22–23 (*Fidia*) from Japan [Fixed by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 412].

Range: Japan, Loo-Choo, Formosa, China, Indo-China, Burma, and India.

General characters.—Body more or less elongate, subcylindrical, with elytra much wider than pronotum, entirely clothed with suberect long pubescence or scalelike setæ or adpressed scales.

Head rather elongate, exserted, perpendicularly or rather obliquely situated to the longitudinal aixs of body, with a rather long and more or less distinct longitudinal sulcus on the middle of frons, frequently with a depression on the middle of inter-ocular area; clypeus separated from frons by the inter-ocular depression or ⌣-shaped impressed-line, generally transverse, with front margin deeply emarginated Mouth-parts, labrum transverse, parallel-sided or rather narrowed anteriorly, rounded at the front corners, nearly straight or emarginate and finely pubescent at the front margin, flat or slightly transversely convex on the surface with anterior marginal area simply depressed or emarginate-depressed and furnished with a few pubescent-punctures along the basal margin of depressed area; mandibles large, robust, each one strongly bended inwardly about the middle, acuminated at the apex with a large tooth below it, deeply hollowed at the inner face with an obtuse angulation about the middle of its upper margin; maxillary palpi rather long and slender, or rather short and robust, with 1st segment very

much smaller than any one of the three followings, 2nd distinctly thickened terminally and somewhat curved, 3rd rather thickened terminally and rather shorter than the 2nd, 4th much longer than the 3rd, thickest at a little beyond the base and strongly thinned basally from there and gently acuminated terminally with apex truncated; labial palpi also rather long and slender, or rather short and robust, with 1st segment very much smaller than any one of the two succeedings, 2nd gently thickened terminally and somewhat curved, 3rd about as long as the preceding one and nearly slender spindle-shaped with apex truncated. Eyes small, placed on each side of the face, distinctly distanted from prothorax, nearly rounded or rotundate-ovate or oblong-ovate in outline, not emarginate at the inner margin, strongly prominent. Antennæ long, filiform, with 1st segment strongly thickened and somewhat curved, 2nd shortest but rather thicker than the 3rd, 3rd to 6th very slender, the five followings slightly thickened, with apex of the 11th more or less pointed. Pronotum subcylindrical, with front and basal margins more or less tuberculate at each lateral extremity and bears a setigerous puncture on each, front margin not bordered, lateral margins obsolete, basal margin very closely followed by a transverse sulcus, dorsum transversely convex with some shallow or faint depressions. Scutellum longer than wide, narrowed posteriorly, truncated at the apex, the truncation straight or more or less rounded. Elytra elongate, much wider at the base than pronotum, parallel-sided, narrowed and rounded at the apex, dorsum strongly convex, generally with a transverse depression behind the base, with punctuation very coarse and frequently arranged inclose rows; humeri distinctly convex and generally free from the strong punctures; elytral epipleura rather oblique or nearly vertical, very narrow and disappeared at the latero-apical corner of each elytron. Underside: prosternum distinctly longer than wide between the fore-coxæ, somewhat constricted on each side, widened posteriorly from the coxæ; pro-episterna with front margin nearly straight or slightly arched posteriorly; mesosternum subquadrate between the middle-coxæ, nearly as wide as long or rather longer than wide; metasternum strongly transverse, with a distinct central longitudinal suture; pygidium completely covered by elytra or exposed beyond the apex of elytra in a small area. Legs rather slender, elongate; fore- and middle-coxæ globular and somewhat prominent, hind-coxæ strongly transverse and not prominent; femora moderately incrassate, constricted near

the apex, armed with a tooth on each underside beyond the middle; tibiæ slender, slightly thickened terminally, longitudinally ridged, hollowed at the apical area of each outer side, armed with a pair of spur on the underside of the two posterior pairs respectively; tarsi narrow, with two basal segments subtrigonate and more or less sulcate longitudinally (on the 1st segment the sulcus sometimes obsolete or completely disappeared), 3rd segment deeply bilobed; claw-segment strongly elongate, clubate and somewhat curved; claws distinctly bifidate.

Secondary sexual characters not noticeable.

Key to the species

1. Dorsal surface clothed with adpressed scales only; general color chestnut brown, with clypeus, mouth-parts, antennæ and legs more or less paler than the others; length: 6.0 to 6.5 mm ..... *sauteri* Chûjô
1'. Dorsal surface clothed with adpressed scalelike setæ and the elytra sparsely mixed with erect or suberect similar setæ besides the general adpressed ones ..... (2)
2. General color black, not covered by powdery excrescence, with elytra, anterior part of head, antennæ and legs yellowish brown; length: ♂, 6.0 mm ..... *taiwanus* sp. nov.
2'. General color black, not covered by powdery excrescence, with elytra, with clypeus, mouth-parts and basal segments of antennæ more or less bear yellow- or red-brown; length (♂, ♀): 4.25 to 5.50 mm ..... *gracilicornis* (Baly)

31. LYPESTHES SAUTERI (Chûjô).

Lypesthes sauteri CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 30–31 (Formosa: Sokutsu in Banshoryo-Distr.).

Body elongate, subcylindrical, with dorsum thickly clothed with adpressed pale fulvous scales, underside thickly clothed with whitish adpressed scales on each side together with legs and very thickly clothed with whitish robust pubescence or setæ on the middle. General color light to dark chestnut brown; clypeus, mouth-parts (excepted the apices of mandibles piceous to black), antennæ and legs more or less paler than the others.

Head somewhat convex, with a broad but shallow depression between the eyes and a central longitudinal impressed-line on the frons, very strongly and thickly punctate, with their interspaces somewhat rugose on the vertex and latero-posterior areas of frons and irregularly reticulate on the almost of the frons, each puncture including a seta in the center; clypeus indistinctly separated from frons by the inter-antennal depression, transverse, somewhat constricted and ridged on each side, distinctly emarginate at the front margin, coarsely punctate, on the basal area, not clothed the scales but the punctures in-

cluding a white seta or scalelike seta in each, impunctate and smooth on the anterior area. Antennæ slender, filiform, much longer than half the length of body, finely pubescent; 1st segment strongly thickened, somewhat curved and furnished with some white scales or scalelike setæ on the dorsal and inner faces, 2nd somewhat thickened terminally and shortest, 3rd to 6th slender, 3rd to 5th slightly diminishing their length terminally or subequal to each other and each one of them longer than the 1st, 6th generally rather shorter than the 5th, 7th to 11th somewhat thickened and the rough order of their length as follows: 7>11>8>9>10 or 7>11>8≒9≒10, 7th rather longer than, or nearly equi-length to, the 3rd, 11th with the apex pointed. Pronotum subcylindrical, rather wider than long, slightly rounded on each side and obscurely margined at the basal half, strongly and irregularly reticulate-punctate, the punctures including a scale in each center, frequently with a longitudinal row of white powdery excrescence on each side. Scutellum rather longer than wide, somewhat narrowed posteriorly, slightly or strongly rounded at the apex, more or less convex on the surface, coarsely punctate, clothed with a scale in the center of each puncture. Elytra elongate, much wider at the base than pronotum, parallel-sided, narrowed and rounded at the apex, completely covering the abdomen; dorsum strongly convex, with a shallow transverse depression behind the basal area, frequently covered on the basal marginal area by the white powdery excrescence, strongly punctured, the punctures without scales and arranging in close and irregular longitudinal rows, interspaces of these punctures thickly clothed with scales, some parts of these scales especially thickly gathering and forming three distinct longitudinal rows on each elytron in many cases, the outermost row of these scales being situated behind the humerus and the bases more or less costate. Underside: general structures as mentioned in the generic description, frequently white powdery excrescent; femora distinctly toothed beneath and claws strongly bifidate as usual.

Length.— ♂ ♀, 6.0 to 6.5 mm.

Local distribution.—Taihoku-Si, Taihoku-Syû (1 Ex., **Paratype**, April 25, 1934, M. Chûjô leg.); Taito, Taitô-Tyô (1 Ex., **Paratype**, March 25, 1935, M. Chûjô leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1 Ex., **Paratype**, March 28, 1935, M. Chûjô leg.); Mt. Sô-zan (altitude about 400 meters), Sitisei-Gun, Taihoku-Syû (2 Exs., **Paratype**, June 15, 1936, M. Chûjô leg.; 1 Ex. **Paratype**, April 18, 1937, M. Chûjô leg.; 1 Ex., **Paratype**, April 23, 1938, M. Chûjô leg.); Kusukusu, Kôsyun-Gun, Takao-Syû (1 Ex.,

Paratype, April 17, 1937, M. Chûjô leg.).
Sokutsu in Banshoryo-Distr. (after M. Chûjô, 1938).
General distribution.—Formosa.

32. LYPESTHES TAIWANUS sp. nov.

Body elongate, narrow, entirely clothed with adpressed griseous or whitish scalelike setæ. General color black, somewhat lustrous; clypeus, mouth-parts (with apices of mandibles black), antennæ, elytra, underside of head, pro-epimera, inter-coxal area of mesosternum and legs yellowish brown; inter-coxal area of prosternum and mesopleura piceous.

Head strongly reticulate-punctate, somewhat convex on the vertex, triangularly depressed on the anterior area of frons; clypeus transverse, somewhat constricted on each side, longitudinally convex and sparsely punctate on the surface, impunctate and glabrous on the anterior area and gently emarginated at the front margin. Antennæ slender, filiform, a little shorter than the whole length of body, finely pubescent; 1st segment strongly thickened and somewhat curved, 2nd clubate, 3rd to 6th slender, 7th to 11th rather thicker than the 6th but much thinner than the 1st, with apex of the 11th bluntly pointed, and the rough order of the length of these segments as follows: 7>11> 3≒5≒4≒6≒9≒10≒8>1>2. Prothorax subcylindrical, with dorsum nearly as long as wide, gently rounded on each side; front and lateral margins not bordered, basal margin narrowly ridged by the presence of a narrow groove very closely along it, all the corners, with a distinct setigerous puncture respectively, strongly and thickly reticulate-punctate. Scutellum much longer than wide, somewhat narrowed posteriorly, gently rounded at the apex, weakly convex and coarsely punctate on the surface. Elytra much longer than wide, much wider at the base than pronotum, gently narrowed posteriorly, strongly narrowed and rounded at the apical part, completely covering the abdomen; dorsum convex, with a shallow depression behind the scutellum, very strongly and thickly punctate, the punctures with a strong tendency to form longitudinal rows and so arranging in many parts, interspaces of these punctures rather reticulate and weakly longitudinally costate behind the humeral callus which is strongly prominent; the scalelike setæ on the elytra sparsely mixed with suberect or erect ones besides the general adpressed ones. Underside: the lateral areas of thorax clothed with scalelike setæ as on the dorsum, but the lateral areas of abdomen

clothed with much thinner true setæ and the median areas of thorax and abdomen not clothed with scalelike setæ but with true pubescence; prosternum much longer than wide, somewhat widened posteriorly, longitudinally convex between the fore-coxæ, distinctly depressed before the hind-margin which is straight; pro-episterna with front margin nearly straight; mesosternum longer than wide and longitudinally convex between the middle-coxæ, rounded at the hind corners which are widely bordered together with hind margin; abdomen with last sternite widely and distinctly emarginated at the apical margin; femora armed with a denticle on each underside much beyond the middle and claws distinctly bifidate as usual.

Length.—♂, 6.0 mm.

Local distribution.—Reimei (altitude about 1,800 meters) in Mt. Hassen-zan, Taityû-Sû (1 ♂, **Holotype**, June 4, 1942, A. Mutuura leg.).

General distribution.—Formosa.

This new species is very closely allied to *Lypesthes anger* Chûjô from Loo-Choo (Amami-Osima), but may be separated from it by the scalelike setæ clothed on the dorsum not yellowish, the antennæ longer and not infuscated together with the legs.

33. LYPESTHES GRACILICORNIS (Baly).

Adoxus gracilicornis BALY, Journ. Ent. 1 (1861) 285 (Hongkong).
Leprotes gracilicornis GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3377 (Hongkong); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 80 (Hongkong).
Lypesthes gracilicornis CHEN, Sinensia, Acad. Sinica 3 6 (1935) 373 (Hongkong); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 813 (Hongkong).

Body narrowly elongate, slightly widened posteriorly; entirely clothed with adpressed white scalelike setæ which are wider on some parts but narrower on some other parts, some of the setæ especially thickly gathering and forming two distinct longitudinal rows on each elytron, elytra bearing erect setæ besides the general adpressed ones. General color shining black and thickly covered by the white powdery excrescence; mouth-parts reddish brown, with palpi paler and apices of mandibles piceous to black; clypeus dark reddish brown to piceous or pitchy black; antennæ blackish, with three or four basal segments yellowish brown and more or less infuscated on the upper surface of the 1st; claws reddish brown.

Head strongly reticulate-punctate, with a long longitudinal impressed-line on the middle, more or less depressed on the

inter-ocular area; clypeus distinctly depressed at both basal and anterior areas, strongly widened anteriorly with a gentle curvature on each side, emarginated at the front margin, faintly reticulate-punctate on the basal depressed-area, irregularly punctate on the median area, impunctate and glabrous on the anterior area. Antennæ slender, filiform, much longer than half the length of body, finely pubescent; 1st segment strongly incrassate and somewhat curved, 2nd clubate, gently curved, nearly equi-length to, but very much thinner than, the 1st and much thicker but rather shorter than the 3rd, and these two basal segments clothed with some white scalelike thin setæ, 3rd to 6th slender and nearly equal in size to each other, 7th to 11th somewhat thickened with apex of the 11th bluntly pointed, and the rough order of the length of these segments as follows: 7>11>6≒5≒4≒9≒8≒3>1≒2. Pronotum subcylindrical, not wider than long (♂) or only a little wider than long (♀) slightly rounded on each side, without lateral margins, strongly reticulate-punctate. Scutellum elongate-subquadrate or nearly obpentagonal, rather longer than wide, slightly narrowed posteriorly, lightly convex and rugosely punctate on the surface. Elytra elongate, much wider at the base than pronotum, more or less widened posteriorly, rounded at the apex; dorsum strongly convex, very coarsely punctate, the punctures arranging inclose and rather irregular longitudinal rows. Underside: prosternum much longer than wide, strongly widened posteriorly, longitudinally convex in the ventral view, shallowly hollowed on the middle of apical area, coarsely punctate, with posterior margin very slightly arched inwardly; pro-episterna with front margin very slightly arched inwardly; mesosternum rather longer than wide, longitudinally convex, with hind margin straight or notched at the middle; pygidium exposed beyond the apex of elytra in a small area and coarsely punctate; femora distinctly denticulate and claws strongly bifidate as usual.

Length: ♂, 4.25 to 4.75 mm; ♀, 5.25 to 5.50 mm.

Local distribution.—Rônô, Heito-Gun, Takao-Syû (1♂ and 1♀, May 4, 1907, I. Nitobe leg.); Hokuzankô, Nôko-Gun, Taityû-Syû (1♂ and 1♀, July 6, 1940, M. Chûjô leg.).

General distribution.—S. China and Formosa.

The Formosan examples are rather smaller than the Chinese specimens (6 to 7 mm in length) originally described by J. S. Baly, but quite identical in the general color and structure.

Lypesthes farinosus Pic from Kosempo recorded by myself in Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 30 belongs to the present species.

Genus xi. XANTHONIA Baly

Xanthonia BALY, Journ. Ent. 2 (1863) 151; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 273; JACOBY, Biol. Center.-Americana, Col. 1 6 (1882) 164; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 74; HORN, Trans. American Ent. Soc. 19 (1892) 196, 199; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 235, 359–360; l. c. 5–6 11 (1940) 491.

Genotype: *Xanthonia stevensi* BALY, Journ. Ent. 2 (1863) 151 from Canada [Synonym of *Xanthonia villosula* (Melsheimer), Proc. Acad. Philadelphia 3 (1847) 169 (*Eumolpus*) from U. S. A.] [Designated by S. H. Chen. Sinensia, Acad. Sinica 3 6 (1935) 359].

Range: North America, Japan, Formosa, and China.

General characters.—Body oblong, subcylindrical, entirely thickly pubescent, with medium area of the underside of thorax very sparsely so or glabrous.

Head well exposed, not sulcate above the eyes, with vertex gently convex, frons also slightly convex on each side but flat or more or less depressed on the middle, generally with a central longitudinal impressed-line; clypeus rather distinctly or indistinctly separated from frons by an arched impression, longitudinally convex on the surface, with anterior marginal area strongly depressed and produced in a leafletlike projection on each side of the middle, so that it appears to be emarginated in the middle. Mount-parts: labrum strongly narrowed anteriorly with a straight line or slight curvature on each side, more or less emarginated at the front margin, nearly flat or slightly transversely convex on the surface, more or less pubescent at the lateral and front margins; mandibles strongly arched inwardly, bidentate at the apex, deeply hollowed at the inner face; maxillary palpi rather slender, with 1st segment extremely smaller than any one of the three followings, 2nd somewhat thickened terminally and rather curved, 3rd distinctly shorter than the 2nd or 4th and rather thickened terminally, 4th thinned terminally and truncated at the apical end; labial palpi also rather slender, with 1st segment minute, 2nd somewhat thickened terminally and rather curved, 3rd thinned terminally and truncated at the apical extremity. Eyes rather large, placed on each side of the face and much distanting from the front margin of pronotum, shortly reniform with inner margin

lightly emarginated, strongly convex on the surface. Antennæ slender, filiform, with 1st segment distinctly thickened and somewhat curved, 2nd shortest but rather thicker than the 3rd, 3rd to 6th very slender, 7th to 11th rather thickened with apex of the 11th pointed. Pronotum subcylindrical, distinctly rounded and immarginated on each side; front margin nearly straight, very narrowly but distinctly bordered and lightly prominent on each lateral extremity bearing a long seta on it, basal margin nearly straight or slightly arched posteriorly and generally weakly sinuate, distinctly or indistinctly bordered and somewhat prominent laterally on each side bearing a long seta on it, dorsum transversely convex. Scutellum more or less narrowed posteriorly, nearly obtrapezoidal or subquadrate with apex rounded. Elytra elongate-subquadrate, much wider at the base than pronotum, narrowed and rounded at the apex, and they entirely cover the abdomen; dorsum strongly convex, with a shallow transverse impression behind the humeral area, regular and very closely punctate-striate, the one stria neighboring the scutellum abbreviated much before the middle, the number of the striæ on each elytron about twenty on the basal area and also about fifteen beyond the middle; humeri distinctly raised, free from the striated punctures; elytral epipleura oblique or vertical, very narrow, gradually narrowed posteriorly and disappearing a little beyond the middle of elytron. Underside: prosternum rather narrow, much longer than wide, constricted between the fore-coxæ, distinctly widened posteriorly, nearly straight or very slightly emarginated at the hind margin, strongly raised between the coxæ and distinctly depressed in front and behind; pro-episterna with front margin straight; mesosternum subquadrate between the middle-coxæ, nearly as wide as, or rather wider than, the inter-coxal area of prosternum, with hind margin straight or gently rounded; metasternum very broad, with a distinct central longitudinal suture. Legs rather long, slender; femora somewhat thickened medially, constricted near the apex, not denticulate beneath; tibiæ very slender, rather thickened terminally, obliquely truncated on the outer side at the apical area, unarmed the spur; tarsi very slender, with 1st segment strongly elongate and scarcely shorter than the two succeedings combined together, 2nd trigonate and longitudinally sulcate on the middle of dorsum, 3rd deeply bilobed, claw-segment elongate-clubate and somewhat curved; claws distinctly bifidate.

The present genus includes about a dozen species only at present, of which four are distributed in the Old World (one species from Japan, one species from Formosa, and two others from China) and the remainders inhabit boreal America.

34. XANTHONIA TAIWANA sp. nov.

Body nearly oblong, subcylindrical, very thickly clothed with pale pubescence on the whole surface. General color pale yellowish brown, with apices of mandibles somewhat infuscated and sometimes the terminal segments of antennæ slightly infuscated.

Head broad, gently convex, very finely shagreened throughout; frons with a central longitudinal suture and shallowly subtriangularly depressed on the anterior area, rather finely but not thickly punctured together with vertex which is more markedly convex than the frons; inter-antennal space distinctly ridged on each side and depressed along the ridge respectively; clypeus broad, not sharply limited from frons, more or less widened anteriorly, deeply emarginated at the middle of front margin and strongly produced forwardly on each side of the emargination, longitudinally convex on the surface with a few distinct punctures. Antennæ slender, filiform, more or less longer than half the length of body; 1st segment distinctly incrassate and somewhat curved, 2nd subcylindrical, rather narrowed terminally and shortest, 3rd to 6th very slender and 7th to 11th somewhat thickened with the apex of 11th pointed, 4th generally always longest in these nine terminal segments and the length of the remainders rather variable by the individual examples but without so distinct differences between them. Pronotum slightly longer than wide, strongly rounded on each side, without lateral borders; dorsum strongly transversely convex, especially strongly deflexed on each side, with a broad but shallow transverse depression nearly along the front margin, finely shagreened throughout, coarsely and rather reticulately punctate throughout. Scutellum with basal two-thirds strongly narrowed posteriorly and apical one-third nearly parallel-sided, slightly rounded at the apex, finely shagreened and irregularly imbricated on the surface. Elytra elongate-subquadrate, much wider at the base than pronotum, nearly parallel-sided, rounded at the apex; dorsum strongly convex, with a shallow transverse depression behind the basal area, regularly and thickly punctate-striate. Underside and legs so structured as in the generic description.

Length.—♂ ♀, 2.25 to 2.50 mm.

Local distribution.—Mt. Ari-san (altitude about 2,300 meters), Tainan-Syû (1 ♀, **Paratype**, October 2 to 23, 1918, J. Sonan leg); Habun (altitude about 580 meters), Bunzan-Gun, Taihoku-Syû (1 ♂ and 1 ♀, **Paratype**, May 12, 1933, M. Chûjô leg.); Musya-Miharasi (altitude about 1,200 meters), Nôkô-Gun, Taityû-Syû (2 ♀ ♀, **Paratype**, July 20, 1940, K. Endo leg.); Musya (altitude about 1,150 meters), Nôkô-Gun, Taityû-Syû (1 ♂, **Holotype** and 1 ♀, **Allotype**, August 12, 1940, M. Chûjô leg.).

General distribution.—Formosa.

This new species is closely allied to *Xanthonia placida* Baly from Japan, but may be distinguished from it by the body slightly shorter and narrower, more finely and thickly pubescent and more feebly punctured on the dorsal surface of the body.

Genus xii. AORIA Baly

Aoria Baly, Journ. Ent. 2 (1863) 149; Trans. Ent. Soc. London 2 4 (1867) 78; Chapuis in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 270; Lefèvre, Mem. Soc. Roy. Sci. Liege (2) 11 (1885) 71; Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 395, 396; Chen, Sinensia, Acad. Sinica 2 6 (1935) 235, 362–363; l. c. 5–6 11 (1940) 491.

Genotype: *Aoria nigripes* (Baly), Journ. Ent. 1 (1860) 28 (*Adoxus*) from Hongkong in S. China [Fixed by J. S. Baly, Journ. Ent. 2 (1863) 149].

Range: Oriental Region.

General characters.—Body oblong or oblong-ovate or ovate, entirely covered with adpressed or subadpressed hairs, the hairs arisen from the punctures and, therefore, the density of the punctures thus determines the thickness of the hair-clothing.

Head perpendicularly placed to the longitudinal axis of body, hardly visible or invisible from above, not sulcate above the eyes, frequently with a longitudinal sulcus on the middle of frons; supra-antennal areas somewhat raised, impunctate, generally finely shagreened; clypeus rather obtusely separated from frons by a depression, distinctly widened anteriorly, but more or less emarginate on each side, with anterior marginal area distinctly depressed, impunctate and front border widely emarginated. Mouthparts: labrum transverse-subquadrate, parallel-sided or gently narrowed anteriorly, rounded at the front corners, straight or slightly emarginated at the front margin, nearly flat or slightly transversely convex on the surface with a transverse row of some large pubescent-punctures beyond the

middle and more or less bending oblique-downwardly beyond the former transverse row of punctures; mandibles robust, with outer margin curving inwardly in a right angle at the middle, acuminated at the apex, deeply hollowed at the inner face with a strong tooth just behind the apex on the lower margin; maxillary palpi slender, with 1st segment very much smaller than any one of the three followings, 2nd gently thickened terminally, 3rd rather strongly thickened terminally, 4th strongly thinned terminally and pointed at the apex, the order of the length of these three latter segments variable, but, at any rate, the difference of length between them are not so remarkable; labial palpi also slender, with 1st segment minute, 2nd slightly thickened terminally and subequal in length to the 3rd, the latter thinned terminally and pointed at the apex. Eyes oblong, strongly convex, with inner margin very slightly emarginated. Antennæ filiform or subfiliform, distinctly longer than half the length of body, finely pubescent; 1st segment strongly incrassate and somewhat curved, 2nd shortest but thicker than the 3rd, 3rd to 6th slender, the five followings somewhat thickened, 11th with a conical appendix at the apex. Prothorax subcylindrical, narrowed in front and also at behind, rounded on each side, front and basal margins furnished with a distinct puncture on each side; lateral margins not bordered or entirely ridged, basal margin distinctly bordered and more or less arched posteriorly at the middle. Scutellum longer than wide, more or less narrowed posteriorly, rounded or truncated at the apex. Elytra subquadrate, much wider at the base than pronotum, narrowed and rounded at the apex, and they not entirely cover the abdomen; dorsum strongly convex, punctate in the eleven longitudinal rows (including a short scutellar and an external marginal row) on each elytron, interstices of these regular rows of punctures sometimes generally strongly and thickly punctate and, by the reason, the striated punctures frequently rather obtuse in one glance, but the striæ more or less noticeably impressed; humeri distinctly raised, free from the striated punctures; elytral epipleura oblique, gradually narrowing posteriorly and disappeared at the apex. Underside: prosternum more or less wider than long between the fore-coxæ, longitudinally convex, nearly straight at the hind margin; pro-episterna small, with front margin straight or slightly arched posteriorly; mesosternum transverse, with hind margin deeply notched; metasternum strongly transverse, with

a distinct central longitudinal suture; abdomen with four basal sternites gradually diminishing their length and width from the 1st to 4th, 5th one rather variable in shape by the sexes; pygidium exposed. Legs long and slender, widely separated from each other; femora somewhat thickened medialy, constricted near the apex and unarmed the tooth or spine on the underside; tibiæ slightly thickened terminally, longitudinally sulcate, with a pair of spur on the apex of underside, two posterior tibiæ (especially the hind-pair) somewhat arched; tarsi long, with two basal segments subquadrate and the 1st longer than the 2nd, 3rd deeply bilobed and shorter than the 2nd, claw-segment strongly elongate, somewhat clubate and curved; claws strongly bifidate.

This genus is divided into three subgenera by the structure of prothorax as follows:

Key to the subgenera

a. Pronotum with lateral margins completely ridged....*Osnaparis* Fairmaire
a'. Pronotum with lateral margins ridged at the base....*Pseudaoriana* Pic
a". Pronotum with lateral margins completely immarginated..*Aoria* s. str.

Pseudaoriana Pic includes only a single species—*lemoulti* Pic—from China.

Subgenus 1. OSNAPARIS Fairmaire

Osnaparis FAIRMAIRE, Ann. Soc. Ent. France (6) 9 (1889) 72; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 363, 364.
Subgenotype: *Osnaparis nucea* FAIRMAIRE, Ann. Soc. Ent. France, (6) 9 (1889) 72 from Moupin in China [Fixed by S. H. CHEN, Sinensia, Acad. Sinica 3 6 (1935) 364].
Range: China, Japan, and Formosa.

General characters as in the generic description and distinguished from the other subgenera by the pronotum with complete and distinct lateral margins.

There is only a single species included in this subgenus at present.

35. AORIA (OSNAPARIS) NUCEA Fairmaire.

Osnaparis nucea FAIRMAIRE, Ann. Soc. Ent. France (6) 9 (1889) 72 (China: Moupin); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 110 (Moupin); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1270 (China).

Aoria (*Osnaparis*) *nucea* CHEN, Sinensia 3 6 (1935) 363, 364, *f. 39* (China: Peiping and Moupin in Szechuan); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 811 (China: Peiping and Moupin); CHÛJÔ, Kontyu, Ent. Soc. Nippon 2 14 (1940) 73 (Japan: Onogahara in Ehime-Ken, Sikoku).

Body nearly oblong, thickly covered with pale yellowish, suberect and long pubescence. General color chestnut brown, rather lustrous; mandibles deep or dark reddish brown to piceous, sometimes with bases black; antennæ black, with four basal segments yellowish brown and the 5th segment frequently more or less yellowish brown; legs with coxæ, trochanters, femora (excepted the apical portions) and claws concolorous with the general color, but tibiæ and tarsi, together with the apical portions of femora, black.

Head inserted in prothorax up to a little behind the eyes, alutaceous or finely shagreened on the whole surface, rather distinctly convex on the vertex, lightly convex on the frons, strongly and sparsely punctate, with a longitudinal groove on the middle of frons; clypeus separated from frons by shallow depression, widened anteriorly, somewhat constricted on each side, widely emarginated at the front margin, strongly and sparsely punctate on the surface with anterior marginal area depressed and impunctate. Antennæ slender, much more than half as long as body, finely pubescent; 1st segment strongly thickened and somewhat curved, 2nd subcylindrical and shortest, 3rd to 6th slender, 7th to 11th lightly thickened with a conical appendix at the tip of 11th, 3rd much longer than the 2nd but much shorter than any one of the others, in the eight terminal segments the length of each one rather variable by the individuals. Pronotum about as long as wide, strongly rounded and very narrowly but completely margined on each side, distinctly bordered and rounded at the hind margin with the median area especially widely bordered; dorsum transversely convex, very faintly shagreened, strongly and extremely thick or rather sparsely punctate. Scutellum elongate, slightly narrowed posteriorly, truncated at the apex with the apical margin nearly straight or slightly rounded, with dorsum very lightly convex, finely shagreened, strongly and thickly or sparsely punctate. Elytra elongate, much wider at the base than pronotum, more or less narrowed posteriorly, rounded at the apex; dorsum strongly convex, with a shallow ⌒-shaped depression behind the scutellum, strongly punctate in eleven longitudinal rows on

each eleytron, interstices of these rows somewhat convex and clothed with rather smaller pubescent-punctures in one or more irregular longitudinal rows on each. Underside: prosternum somewhat constricted on each side between the fore-coxæ, very slightly rounded at the hind margin, longitudinally convex and coarsely punctate on the surface; pro-episterna with front margin nearly straight; mesosternum transverse, very strongly emarginated at the hind margin, coarsely punctate on the surface; metasternum, abdomen and legs as in the generic description in their structures.

Male.—Clypeus and pronotum narrower, antennæ longer, prosternum much longer than wide, pygidium with apical margin widely and nearly straightly truncated and not depressed on the surface.

Female.—Elytra with a distinct longitudinal ridge on each side behind the humeral callus, pygidium with apical margin narrowly rounded and surface distinctly depressed on the apical area.

Length.—♂, 5.0 mm; ♀, 5.5 mm [The Chinese example was measured at 5.5 to 6.7 mm by S. M. Chen (1935)].

Local distribution.—Mt. Ari-san, Tainan-Syû (1♂, October 2 to 23, 1918, J. Sonan leg.); Urai Bunzan-Gun, Taihoku-Syû (1♀, June 24, 1933, M. Chûjô leg.); Mt. Sô-zan, Sitisei-Gun, Taihoku-Syû (1♀, May 29, 1938, M. Chûjô leg.).

General distribution.—China, Japan, and Formosa.

This species is newly added to the fauna of Formosa.

Subgenus 2. AORIA s. str.

Aoria s. str. CHEN, Sinensia, Acad. Sinica 3 6 (1935) 363. 364.
Subgenotype: *Aoria nigripes* (Baly), Journ. Ent. 1 (1860) 82 (*Adoxus*) from Hongkong in S. China.
Range: Oriental Region.

General characters as in the generic description; pronotum completely immarginated on each side.

Key to the species

1. General color castaneous red; pronotum with a black spot on the middle and another black spot on each side near the fore-coxa, elytra with five black spots ..... *quinquemaculata* Bates
1'. Pronotum and elytra not maculated ..... (2)
2. General color pale castaneous or reddish brown, sometimes partly or entirely fuscous; antennæ (three or four basal segments excepted) and legs (excepted the coxæ, trochanters and claws) black, sometimes the legs (especially the femora) more or less rufous. *nigripes* (Baly)

2'. General color black; maxillæ and labium, together with their palpi, yellowish brown to reddish brown, partly stained with piceous or black; three or four basal segments of antennæ more or less yellowish brown, with dorsal surface of the 1st segment always black; claws reddish brown ..... *nigrita* Jacoby subsp. *taiwana* nov.

36. AORIA (s. str.) QUINQUEMACULATA Bates.

Aoria quinquemaculata BATES, Proc. Zool. Soc. London (1866) 354 (Formosa);* GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3375 (Formosa); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 70 (Formosa); MIWA, Syst. Cat. Formosan Col. (1931) 187 (Formosa: Taihoku).

Body subquadrate-oblong, thickly covered with grayish white adpressed pubescence on the whole surface, the pubescence on the underside shorter than those on the elytra and the pubescence on the head and pronotum thinner than those on the elytra or underside. General color castaneous red, with mandibles darker, basal segments of antennæ and palpi paler; pronotum with a black spot on the middle and another black spot on each side near the fore-coxæ (thus the latter spots invisible from above); elytra with five black spots as follows: two on the base and each one of them touches to the basal margin of elytron, scutellum and inner side of humeral elevation, one on the suture just before the middle, two just behind the middle and each one of them more approaches to the lateral margin than to the suture; underside with black spots or irregular black areas on each side and these black parts variable by the individuals.

Head gently convex, finely shagreened throughout, with a shallow longitudinal depression on the middle of frons, strongly and thickly punctate, distinctly depressed between the supra-antennal areas which are more or less raised and impunctate. Antennæ distinctly longer than half the length of body, with 1st segment strongly thickened terminally and curved, 2nd shortest and somewhat thickened terminally, 3rd to 6th slender, 7th to 11th distinctly thickened with a conical appendix at the tip of 11th, and the rough order of the length of these segments as follows: ♂, 4>5>6≒1>3>11>7>8>9>10, or ♀, 4>1≒5>6≒11>7≒8>9>3>10>2, but these are not con-

* H. W. Bates added the following lines at the end of his original description of the present species: Mr. Baly has received this species also from North China.

The N. Chinese example, however, will perhaps be identical with *Aoria* (s. str.) *bowringii* Baly—originally described from Nepal and N. China, and at present also known from C. and S. China, Indo-China, Burma, Assam, Andamans, Penang, Malacca, Sumatra, and Borneo—is very closely allied to the present species, but never identical.

clusive one. Pronotum much longer than wide, rather wider at the anterior end than the base, rounded on each side, immarginated on each side, distinctly bordered at the basal margin with median area arched posteriorly; dorsum strongly transversely convex, finely shagreened throughout, very strongly and thickly punctate, the punctures larger on the middle and finer along the front margin. Scutellum longer than wide, narrowed posteriorly, slightly or rather markedly rounded at the apex, finely shagreened and coarsely punctate on the surface. Elytra elongate-subquadrate, much wider at the base than pronotum, slightly narrowed posteriorly, distinctly narrowed and rounded at the apex; dorsum strongly convex, strongly punctate in eleven longitudinal rows on each elytron as usual, the rows somewhat broadly sulcated, with their interstices thickly punctulate excepted on the post-median black spot, these interstitial punctures especially smaller and more thickly settled on the apical area. Underside: prosternum longer than wide, distinctly widened posteriorly, with hind margin more or less rounded, longitudinally raised and coarsely punctate on the surface; pro-episterna with front margin gently arched inwardly; mesosternum rather wider than long, with hind margin more or less emarginated.

Male.—Clypeus narrower; supra-antennal areas more strongly raised; pro- and mesosternum narrower, with hind margin of prosternum more strongly arched posteriorly; pygidium nearly obtrapezoidal, with apical margin gently rounded.

Female.—Pygidium nearly obtriangular, with apex rounded and surface more strongly depressed than in male.

Length.—♂, 4.75 to 5.00 mm; ♀, 5.75 to 6.00 mm.

Food-plant.—*Ampelopsis heterophylla* (Thunb.) Sieb. et Zucc. (Japanese name: *No-budó*).

Local distribution.—Taihoku-Si, Taihoku-Syû (3 ♂ ♂ and 6 ♀ ♀, May 15, 1932; 4 ♂ ♂ and 6 ♀ ♀, June 12, 1932; M. Chûjô leg.).

Thaihoku (after Y. Miwa, 1931).

General distribution.—Formosa.

37. AORIA (s. str.) NIGRIPES (Baly).

Adoxus nigripes BALY, Jour. Ent. 1 (1860) 28 (Hongkong).

Aoria nigripes BALY, Journ. Ent. 2 (1863) 149 (China); Trans. Ent. Soc. London 2 4 (1867) 79 (From Siam to China); GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3375 (Hongkong); JACOBY, Notes Leyden Mus. 6 (1884) 203 (E. Sumatra: Serdong); FAIRMAIRE, Ann. Soc. Ent. France (6) 8 (1888) 372 (Tonkin); LEFÈVRE,

Ann. Soc. Ent. rFance (6) 9 (1889) 291, 296 (Indo-China: Pnohm-Penh in Cambodia and Lien-Son in Tonkin); Nouv. Archiv. Mus. Paris (3) 2 (1890) 194 (Indo-China); JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II., Chrysom. 1 (1908) 396 (India: Malabar; Assam; Burma; China; Sumatra); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 70 (India China, and Sumatra); WINKLER, Col. Reg. Palaearcticæ Col. 11 2 (1930) 1267 (China); MIWA, Syst. Cat. Formosan Col. (1931) 187 (Formosa: Taihoku and Garambi); CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 29–30 (Formosa: Taihorinsho, Taihorin, Kankan in Koshun-Distr., and Sokutsu in Banshoryo-Dist.).

Aoria (s. str.) *nigripes* CHEN, Sinensia, Acad. Sinica 3 6 (1935) 363, 366–367 (China: Nanking and Kweichow); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 811 (China: Nanking and Kweichow).

Body nearly ovate, thickly covered with grayish white or yellowish white long and adpressed pubescence, the latters on the legs nearly white in coloration. General color pale castaneous or reddish brown, sometimes partly or entirely fuscous; antennæ and legs (excepted the coxæ, trochanters and claws) black, sometimes the legs (especially the femora) more or less rufous.

Head finely shagreened throughout, strongly and thickly punctured, with a short longitudinal impression on the middle of frons, sometimes raised and impunctate above the antennal pores, constricted on each side of frons which is obscurely delimited from frons by a shallow depression and gently emarginated at the front margin. Antennæ much longer than half the length of body, with 1st segment strongly thickened and somewhat curved, 2nd shortest, subcylindrical and rather thicker than the 3rd, 3rd to 6th slender, 7th to 11th somewhat thickened with a blunt-headed conical appendix at the tip of the 11th, and the rough order of the length of them as follows: $7>4\fallingdotseq 1\fallingdotseq 11>5>6>8>9>10>3>2$. Pronotum rather wider than long, distinctly rounded and completely immarginated on each side, markedly arched posteriorly at the basal margin, the latter not bordered but very closely followed by a transverse sulcus on each side of the median area which is distinctly bordered and somewhat produced posteriorly with apical margin widely straight; dorsum very strongly convex, very finely shagreened throughout, very strongly and thickly punctured. Scutellum nearly obpentagonal, somewhat longer than wide, gently narrowed posteriorly, finely shagreened and coarsely punctate on the surface. Elytra subquadrate, somewhat longer than wide,

much wider at the base than pronotum, narrowed and rounded at the apex; dorsum strongly convex; punctate in eleven longitudinal rows on each elytron as usual, with their interspaces very thickly punctured, these interstitial punctures including a pubescence in each but the straited larger punctures not pubescent. Underside: prosternum more or less transverse, somewhat constricted on each side between the fore-coxæ, widened posteriorly, almost straight at the hind margin, longitudinally raised and coarsely punctate on the surface; proepisterna with front margin slightly arched posteriorly or nearly straight; mesosternum transverse between the middle-coxæ, with hind margin deeply emarginated, rather coarsely punctate on the surface.

Male.—Clypeus, pronotum and pro- and mesosternum narrower, last segment of maxillary palpi much thicker, antennæ longer, pygidium with apex more narrowly rounded.

Female.—Pygidium much more widely rounded at the apex.

Length.—♂, 4.5 to 5.0 mm; ♀, 6.0 mm.

Food-plant.—*Ampelopsis heterophylla* (Thumb.) Sieb. et Zucc. (Japanese name: *No-budô*).

Local distribution.—Taihoku-Si, Taihoku-Syû (1♀, October 15, 1931; 1♂, June 19, 1932; M. Chûjô leg.); Mt. Hinoki-yama, Bunzan-Gun, Taihoku-Syû (1♂, May 29, 1934, M. Chûjô leg.); Kuaru, Kôsyun-Gun, Takao-Syû (2♀♀, June 14, 1937, M. Chûjô leg.).

Taihoku and Garambi (after Y. Miwa, 1931); Taihorinsho, Taihorin, Kankau in Koshun-Distr. and Sokutsu in Banshoryo-Distr. (after M. Chûjô, 1938).

General distribution.—S. to W. India, Assam, Burma, China, and Formosa.

38. AORIA (s. str.) NIGRITA Jacoby subsp. TAIWANA nov.

Body nearly oblong, thickly covered with long, suberect and grayish white pubescence. General color black; maxillæ and labrum, together with their palpi, yellowish brown to reddish brown, partially stained with piceous or black; three or four basal segments of antennæ more or less yellowish brown, with dorsal surface of the 1st segment always black; claws reddish brown.

Head finely shagreened throughout, strongly and thickly punctured, with a short (sometimes long) longitudinal impression on

the middle of frons; supra-antennal areas gently raised, impunctate and finely shagreened; clypeus rather indistinctly separated from frons by a shallow depression, distinctly widened anteriorly, somewhat constricted on each side, gently emarginated at the front margin, more sparsely punctured on the surface than on the frons, finely shagreened with the exception of the anterior marginal area which is depressed and smooth. Antennæ rather more than half the length of body, with 1st segment strongly thickened and somewhat curved, 2nd shortest and subcylindrical, 3rd and 4th most slender, 4th more or less longer than the 3rd and nearly equal in length to the 1st, 5th and 6th slightly thicker than the 4th, 6th shorter than the 5th and nearly equal in length to the 4th, the five terminal segments somewhat thickened, 7th longest, 8th to 10th nearly equi-length to each other and each one of them nearly equi-length to the 5th, 11th shorter than the 7th longer than the 10th with a conical appendix at the tip. Pronotum much wider than long, strongly rounded and completely immarginated on each side, distinctly bordered and oblique on each side of the median portion at the basal margin, the median area more widely bordered and nearly straight: dorsum very strongly convex, finely shagreened throughout, thickly and strongly punctured. Scutellum narrow, much longer than wide, narrowed posteriorly, shortly obliquely straight on each side of the posterior end, finely shagreened and coarsely punctured on the surface. Elytra elongate, much wider at the base than pronotum, distinctly narrowed posteriorly, rounded at the apex; dorsum strongly convex, strongly punctate (the punctures not including the pubescence) in eleven longitudinal rows on each elytron as usual, interstices of these straited punctures thickly pubescent-punctulate and somewhat transversely wrinkled behind the basal region. Underside: prosternum transverse, somewhat constricted on each side between the fore-coxæ, gently rounded at the hind margin, longitudinally raised and coarsely punctate on the surface; pro-episterna with front margin slightly arched posteriorly; mesosternum transverse between the middle-coxæ, deeply notched at the hind margin, coarsely punctate on the surface.

Male.—Clypeus and pronotum narrower, antennæ longer, elytra more strongly narrowed posteriorly, pro- and mesosternum more strongly transverse, pygidium with apical margin straight.

Female.—Pygidium with apical margin gently or strongly rounded.

Length.—♂, 5.0 to 5.5 mm; ♀, 5.75 to 6.25 mm.

Local distribution.—Rônô, Heitô-Gun, Takao-Syû (1♀, **Paratype**, May 4, 1908, I. Nitobe leg.); Mt. Ari-san (altitude about 2,300 meters), Tainan-Syû (1♀, **Paratype**, June, 1914, M. Maki leg.; 1♀, **Paratype**, October 2 to 23, 1918, J. Sonan leg.); Kôsyun, Kôsyun-Gun, Takao-Syû (1♂, **Paratype**, April 25 to May 25, J. Sonan leg.); Musya (altitude about 1,150 meters), Nôkô-Gun, Taityû-Syû (1♀, **Paratype**, April 18 to May 15, 1919, T. Okuni leg.); Sintiku, Sintiku-Syû (1♀, **Paratype**, July 1 to 30, 1918, J. Sonan leg.); Tabô (altitude about 300 meters), Ratô-Gun, Taihoku-Syû (1♀, **Paratype**, March 25, 1926, T. Shiraki leg.); Kusukusu (altitude about 50 meters), Kôsyun-Gun, Takao-Syû (1♂, **Paratype**, March 25, 1926, S. Issiki leg.); Kayahara (altitude about 400 meters), Ratô-Gun, Taihoku-Syû (2♀♀, **Paratype**, July 23, 1929, Y. Miwa leg.); Nisimura (altitude about 400 meters), Ratô-Gun, Taihoku-Syû (1♀, **Paratype**, July 24, 1929, Y. Miwa leg.); Kahodai (altitude about 800 meters) in Mt. Hassen-zan, Taityû-Syû (1♀, **Paratype**, July 1, 1932, M. Chûjô leg.; 1♀, **Paratype**, June 3, 1942, A. Mutuura leg.); Tyakon (altitude about 40 meters), Bunzan-Gun, Taihoku-Syû (1♀, **Paratype**, May 25, 1934, M. Chûjô leg.); Raisya (altitude about 300 meters), Tyôsyû-Gun, Takao-Syû (1♀, **Paratype**, July 26, 1935, Y. Miwa leg.); Mt. Sô-zan (altitude about 400 meters, Sitisei-Gun, Taihoku-Syû (1♂, **Holotype**, May 24, 1936, M. Chûjô leg.); Tipon, Taitô-Gun, Taito-Tyô (1♂, **Paratype**, June 13, 1940, M. Chûjô leg.); Kasinokidaira (altitude about 1,500 meters) in Mt. Taiheizan, Taihoku-Syû (1♀, **Allotype**, July 23, 1940, M. Chûjô leg.); Reimei (altitude about 1,500 meters) in Mt. Hassen-zan, Taityû-Syû (1♂, **Paratype**, June 4, 1942, S. Issiki leg.).

General distribution.—Formosa.

This new subspecies differs from the original form by the legs (excepted the claws) entirely black, the elytral striated punctures much smaller and rounded, and the interstices of these punctured striæ not so strongly and widely wrinkled.

The Formosa examples identified by Y. Miwa [Syst. Cat. Formosan Col. (1931) 187 from Musha, Arisan, Shinchiku, Koshun, and Tabo] and also M. Chûjô [Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 30] as *Aoria nigrita* Jacoby are identical with the present new subspecies.

Tribe VII. EUMOLPINI

Eumolpites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 299.

Eumolpitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 100.

Eumolpini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 438; CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 487–489.

General characters.—Body subquadrate-ovate or shortly oblong in outline, strongly convex on the dorsum.

Head deeply engaged in prothorax, flat, perpendicularly placed to the longitudinal axis of body. Eyes globular, obsoletely sinuate at each inner margin. Antennæ filiform. Pronotum transverse, with lateral margins rounded and narrowly bordered. Scutellum variable in shape. Elytra elongate-subquadrate, nearly as wide at the base as, or rather wider at the base than, the base of pronotum, narrowed and rounded at the apex; dorsum strongly convex, generally irregularly punctured, frequently more or less rugose on each latero-basal area and as a rule the rugosity stronger in female than in male. Prosternum wide, subquadrate between the fore-coxæ. Pro-episterna with front margin straight or arched posteriorly. Legs robust; femora thickened medially, tibiæ slender, but more or less thickened at each apex and not emarginated near the apex of each one of the two-hind pairs, tarsi rather short and broad, with 3rd segment deeply bilobed, claws bifidate.

Male.—Tibiæ strongly thickened and curved inwardly in most cases.

This group contains four genera, but three of them without any relation to our faunistic region at present.

Genus xiii. COLASPOSOMA Laporte

Colasposoma LAPORTE in Silbermann, Rev. d'Ent. 1 (1833) 22; J. THOMSON, Arch. Ent. 2 (1858) 374; BALY, Trans. Ent. Soc. London 2 4 (1867) 270; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 301; LEFÈVRE, Mém. Soc. Roy. Liége (2) 11 (1885) 103; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 439; REITTER, Fauna Germanica 4 (1912) 105; CHEN, Sinensia, Acad. Sinica 3 6(1936) 234, 329–331; l. c. 5–6 11 (1940) 489.

Thysbe J. THOMSON, Arch. Ent. 2 (1858) 370.

Acis MOTSCHULSKY in Schrenck, Reise Amurlander 2 (1860) 177.

Dasychlorus FAIRMAIRE, Bull. Soc. Ent. France (1898) 19; JACOBY, Proc. Zool. Soc. London (1900) 223.

Genotype: *Colasposoma senegalense* LAPORTE in Silbermann, Rev. d'Ent. 1 (1833) 22 from Senegal [Designated by M.

Jacoby, Fauna, Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 439].

Range: Ethiopian, Oriental and Australian Regions; Siberian and Manchurian Subregions.

General characters.—Body short, generally oblong in outline, distinctly convex on the dorsum which is generally glabrous, but rarely pubescent; head, antennæ, underside and legs more or less pubescent; nearly always metallic in coloration.

Head deeply inserted in prothorax, flat on the surface, perpendicularly placed to the longitudinal axis of body; clypeus not separated from frons, with front margin emarginated. Mouthparts: labrum subquadrate, generally transverse, rounded and pubescent at the front corners, somewhat emarginated at the middle of front margin, flat on the surface with anterior marginal area more or less depressed; mandibles robust, strongly incurved, sharply acuminated at the apex, hollowed at the inner face with an obtuse angulation behind the middle of the upper margin and a large triangular angulation at the middle of the lower margin; maxillary palpi rather slender, with 1st segment very much smaller than any one of the three followings, 2nd strongly thickened terminally and somewhat curved, 3rd distinctly thickened terminally and shorter than the 2nd or 4th, the last one thinned terminally and rather bluntly pointed at the apex; labial palpi also rather slender, with 1st segment extremely smaller than any one of the two succeedings, 2nd strongly thickened terminally, clubate and somewhat curved, 3rd nearly equal in length to the 2nd, thinned terminally and bluntly pointed at the apex. Eyes rather small, somewhat longer than wide, strongly convex on the surface, with inner margin slightly or gently emarginated at the middle. Antennæ filiform, generally half, or rather more than half, the length of body, with 1st segment strongly incrassate, 2nd to 6th slender and the five remainders more or less thickened and widened. Pronotum strongly transverse, rounded on each side, not narrowed in front; front margin immarginated at the middle but narrowly bordered on each side, front angles acutely produced laterally and furnished with a setigerous puncture near the tip, lateral margins narrowly explanate and with well-defined margins, basal angles forming a distinct blunt-headed projection at each and bears a setigerous puncture on the tip, basal margin distinctly bordered and gently sinuate on each side of the median area wihch is arched posteriorly, dorsum transversely convex.

Elytra elongate-subquadrate or broadly ovate, nearly as wide as, or rather wider than, the base of pronotum at the basal extremity, narrowed and rounded at the apex; dorsum strongly convex, with latero-basal areas a little developed downwardly, generally confusedly punctate throughout, but sometimes partly striate-punctate, often transversely rugose or costate behind the humeri which are distinctly raised and free from the large punctures, rarely with some longitudinal ridges on each side; elytral epipleura horizontal or slightly oblique, distinct from the base to near the apex and gradually narrowed posteriorly. Underside: prosternum wide, subquadrate between the fore-coxæ, with surface flat or slightly depressed and posterior margin straight or rather emarginated at the middle; pro-episterna with front margin straight or arched posteriorly or gently sinuate; mesosternum transverse subquadrate between the middle-coxæ, rather narrower and much shorter than the prosternum, with hind margin often slightly sinuate; 1st abdominal sternite distinctly longer than any one of the four followings, with medio-anterior area widely produced forwardly between the hind-coxæ. Legs robust: femora thickened medially, constricted at a little before the apex, sometimes armed with a tooth or denticle on the underside; tibiæ slender, more or less thickened terminally, with many longitudinal sulci and ridges hollowed at the apical extremity, unarmed the spur; tarsi with two basal segments subtrigonate, 3rd one deeply bilobed, claw-segment clubate and somewhat curved, claws bifidate.

Male.—Apex of tibiæ (especially of the fore-legs) mostly strongly thickened and curved inwardly.

Female.—Tibiæ simple; pronotum often wider than in male; rugosity or costæ on each side of elytra, when in present, stronger than those of male; terminal segments of antennæ, in some species, more strongly widened in male; rarely with a row of tubercles nearly along the lateral margins of elytra.

39. COLASPOSOMA OBERTHURI Jacoby. **Fig. 8.**

Colasposoma oberthüri JACOBY, Ent. 392 29 (1896) 6–7 (Loo-Choo: Oshima); MIWA, Trans. Nat. Hist. Soc. Formosa 114 21 (1931) 186 (Formosa); Syst. Cat. Formosan Col. (1931) 187 (Formosa: Taihoku, Hokuto, Kagi, Arisan, Hori, Rato, Kwarenko, and Kotosho); YUASA in Icon, Ins. Japonicorum (1932) 601 (Loo-Choo and Formosa); CHÛJÔ with Miwa et Mitono, Trans, Nat. Hist. Soc. Formosa 121 22 (1938) 304 (Formosa: Kotosho); MIWA, Trans. Nat. Hist. Soc. Formosa 124 23 (1933) 11 (Loo-Choo: Is.

Iriomote); CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 136–139 25 (1935) 79 (Loo-Choo: Okinawa, Naze in Amami-Oshima, Ishigaki-jima, Nago in Okinawa-Honto and Iriomote-jima); l. c. 142 25 (1935) 204, 210 (Loo-Choo: Isls. Iriomote, Ishigaki, Okinawa, and Amami-Oshima); MIWA, Trans. Kansai Ent. Soc. 6 (1935) 23 *pl. iii. f. 13* (Loo-Choo: Amami-Oshima); CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 31 (Formosa: Kosempo, Fuhosho, Anping, Taihorinsho, Taihorin, Hoozan, Kankau in Koshun-Distr. and Sokutsu in Banshoryo-Distr.).

Colasposoma Oberthüri CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 103 (Liu-Kiu Is.).

Ecology, Economics, etc:

Chrysochus chinensis (nec Baly, 1859) SHIRAKI, Special Rep. 1, Agr. Exp. Stat., Gov. Taiwan (1910) 201–202, *pl. 28, 7ff.* (Formosa); Cat. Ins. Nox. Formosanum (1911) 55 (Formosa); Special Rep. 8 Agr. Exp. Stat., Gov. Taiwan (1913) 596 (Formosa).

Colasposoma oberthüri MIWA in Rep. 666, Bur. Plant. Industr. Gov.-Taiwan (1934) 115, *pl. 7, ff. 6–9* (Formosa).

Body shortly oblong in outline, with dorsum strongly convex and glabrous. General color cupreous bronzy, strongly lustrous, with outer margin of labrum, 2nd to 6th antennal segments (frequently more or less infuscated and bear a metallic shimmer) and claws yellowish brown to reddish brown. Sometimes the following variations of the ground color may be seen: *1.* Supreous green or greenish cupreous, *2.* Metallic deep blue, *3.* Metallic violaceous blue or bluish violaceous, *4.* Metallic deep violaceous, with elytra metallic deep green and narrowly margined with deep violaceous, *5.* Metallic greenish blue or bluish green, *6.* Metallic greenish blue, with pronotum purplish blue and elytra, metallic purplish red with the lateromarginal areas bluish, *7.* Metallic deep green, *8.* Golden green, *9.* Purplish blue, with elytra bronzy green, *10.* Head violaceous blue, pronotum violaceous, elytra purplish red, underside and legs greenish blue, and all of these color metallic, *11.* Head and pronotum metallic green, elytra cupreous green to cupreous red or purplish red with the lateral and sutural areas narrowly metallic green.

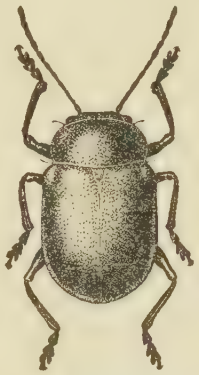


FIG. 8. *Colasposoma oberthüri* Jacoby.

Head strongly and thickly pubescent-punctate, interspaces of these punctures strongly or weakly rugose, usually with a small smooth area on the middle of the anterior area of frons, frequently with a linear longitudinal smooth area on the middle of frons. Antennæ filiform, more or less longer than half the length of body, with 1st segment strongly thickened, 2nd nearly equi-length to, or slightly shorter than, the 4th or 6th but thicker than any one of the two latters, 5th shorter than the 3rd but longer than the 4th or 6th, 7th to 10th distinctly thickened terminally, 7th rather longer than the 8th, the latter and the two followings nearly equal in size, 11th also distinctly thickened, nearly rhombic in outline and about as long as the 7th with the apex bluntly pointed. Pronotum strongly transverse, more than twice as wide as it is long, rather wider at the apical end than the basal extremity, rounded on each side; lateral margins narrowly explanate and distinctly ridged, basal margin distinctly bordered and very slightly bisinuate on each side of the median area which is a little arched posteriorly; dorsum transversely convex, strongly and thickly punctate throughout, more or less rugose on each side. Scutellum subquadrate, parallel-sided, rounded at the apical margin, flat on the surface with the apical area gently bends downwardly, strongly punctate on the basal two-thirds of the whole surface, interspaces of these punctures very finely but not very thickly punctulate under a lens. Elytra elongate-subquadrate, narrowed and rounded at the apex strongly convex on the dorsum, strongly and thickly punctate, the punctures partially arranging in longitudinal rows, interspaces of these punctures finely but sparsely punctulate. Underside rather thickly pubescent-punctate, the punctures much finer than those on the dorsum; prosternum widened posteriorly between the fore-coxæ, nearly straight at the hind margin, somewhat depressed on the middle of surface, very thickly pubescent-punctate, the pubescence much longer than those on the others, interspaces of these punctures rugose on the posterior area or near the whole surface; pro-episterna with front margin nearly straight; mesosternum more sparsely but strongly pubescent-punctate than on the prosternum between the middle-coxæ, the punctuation also stronger than those on the metasternum and abdomen.

Male.—Antennæ much longer than half the length of body, elytra neither rugose behind the humeri nor costate on each side, last abdominal sternite weakly emarginate at the apical

margin, apex of fore-tibiæ strongly dilated inwardly and distinctly ridged at the basal half of the inner margin of dilated area.

Female.—Antennæ only a little longer than half the length of body, pronotum and inter-coxal area of prosternum wider than those of male, elytra distinctly rugose behind the humeri and somewhat costate longitudinally on each side, apical margin of last abdominal sternite distinctly emarginated, apex of fore-tibiæ not peculiarly dilated.

Length.—♂, 4.0 to 6.5 mm; ♀, 4.5 to 6.5 mm.

Food-plant.—*Ipomoea batatas* (Linn.) Poir. (Japanese name: *Satumaimo*); *Ipomoea cairica* (Linn.) Sweet (Japanese name: *Taiwan-asagao*).

Local distribution.—Taihoku-Si, Taihoku-Syû (1♂ and 1♀, May 9, 1930, M. Chûjô leg.; 2♂♂ and 7♀♀, May 15, 1932, M. Chûjô leg.; 1♂, June 12, 1932, M. Chûjô leg.); Sinten, Bunzan-Gun, Taihoku-Syû (1♂ and 1♀, May 17, 1931, M. Chûjô leg.); Urai, Bunzan-Gun, Taihoku-Syû (1♂ and 2♀♀, June 26, 1932, M. Chûjô leg.); Rimogan, Bunzan-Gun, Taihoku-Syû (1♀, May 12, 1933, M. Chûjô leg.); Tonroku, Bunzan-Gun, Taihoko-Syû (1♂ and 1♀, May 25, 1934, M. Chûjô leg.); Siigao, Tikutô-Gun, Sintinku-Syû (1♂ and 1♀, June 27 to 30, 1934, M. Chûjô leg.); Musya, Nôkô-Gun, Taityû-Syû (1♂, August 30, 1934, M. Chûjô leg.); Hôrin, Hôrin-Gun, Karenkô-Tyô (1♀, August 25, 1934, M. Chûjô leg.); Tipon, Taitô-Gun, Taitô-Tyô (1♀, March 24, 1935, M. Chûjô leg.); Taityû-Si, Taityû-Syû (1♀, March 14, 1937, Y. Chûjô leg.); Mt. Sô-zan, Sitisei-Gun, Taihoku-Syû (1♀, May 16, 1937, M. Chûjô leg.); Kuaru, Kôsyun-Gun, Takao-Syû (2♂♂, June 20, 1937, M. Chûjô leg.); Hatonosawa in Mt. Taihei-zan, Taihoku-Syû (4♂♂ and 1♀, July 22, 1940, M. Chûjô leg.).

Is. Bôko-tô (Pescadores), Takao-Syû (1♀, April 24, 1920; 2♀♀, April 27, 1920; 1♂, April 29, 1920; T. Shiraki leg.).

Is. Kizan-tô, Taihoku-Syû (2♂♂ and 3♀♀, July 5, 1932, K. Kobayashi leg.). Is. Kôtô-syo (Botel-Tobagos), Taitô-Tyô (2♂♂ and 2♀♀, April 1936, Y. Chûjô leg.; 1♂ and 1♀, April 20 to July 10, 1938, M. Chûjô leg.).

Taihoku, Hokuto, Kagi, Arisan, Hori, Rato, Kwarenko and Kotosho (after Y. Miwa, 1931); Kotosho (after M. Chûjô, 1932); Kosempo, Fuhosho, Anping, Taihorinsho, Taihorin, Hoozan, Tainan, Kankau in Koshun-Distr., and Sokutsu in Banshoryo-Distr. (after M. Chûjô, 1938).

General distribution.—Loo-Choo and Formosa.

Tribe VIII. EDUSELLINI

Edusites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 306.
Edusitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 111.
Edusinæ JACOBY, Trans. Ent. Soc. London (1900) 500.
Edusini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 456.
Edusellini CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914)
Colaspoidini CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 487, 488, 491–492 (pars).

General characters.—Body elongate, subcylindrical, entirely pubescent or with dorsum glabrous. Head immersed in prothorax, generally invisible or hardly visible from above, without sulcus on each side above the eye. Antennæ subfiliform, with five terminal segments more or less distinctly dilated or flattened. Pronotum truncate-subconical viewed dorsally, with distinct lateral margins. Elytra elongate, wider than pronotum, semicylindrically convex, with lateral areas generally more or less transversely rugose. Prosternum distinctly longer than wide. Pro-episterna with front margin arched forwardly. Tibiæ not emarginate at the apex. Claws appendiculate.

This group contains fourteen genera, of which the Oriental genera are only three, viz.—*Abrius* Chapuis, *Abirellus* nov., and *Olorus* Chapuis. *Olorus* Chapuis includes only a single species from Siam until at present and the other two genera have a relation to our faunistic region and may be separated as follows:

Key to the genera

a. Elytra confusedly or irregularly punctate, very strongly transversely rugose at the sides; pronotum transversal; pro-episterna with front margin slightly arched forwardly; tarsi with 1st segment much shorter than the two following ones combined together ..... *Abirus* Chapuis

a'. Elytra more or less regularly striate-punctate, with a weak tendency to form transverse rugosities on each side; pronotum about as wide as long; pro-episterna with front margin strongly arched forwardly; tarsi with 1st segment nearly as long as the two succeeding ones combined together ..... *Abirellus* nov.

Genus xix. ABIRUS Chapuis

Abirus CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 310; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 113; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 456; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 233, 259–260; l. c. 5–6 11 (1940) 492.

Demorrhytis BALY, Trans. Ent. Soc. London 2 4 (1867) 262–263 (pars).

Genotype: *Abirus æneus* (Wiedemann) in GERMAR, Mag. Ent. 4 (1921) 182 (*Cryptocephalus*) from Java [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 456].

Range: Oriental Region; Manchurian and Austro-Malayan Subregions.

General characters.—Body elongate, subcylindrical, with dorsum either pubescent or glabrous, but the other areas always more or less pubescent.

Head rather deeply immersed in prothorax, invisible or hardly visible from above, without sulcus on each side above the eye, gently convex on the upper area; clypeus broad, not distinctly separated from frons, with front margin gently emarginate. Mouthparts: labrum transverse subquadrate, with front corners rounded, front margin finely pubescent and emarginate at the middle, slightly transversely convex on the surface with anterior marginal area distinctly emarginate-depressed, furnished with some distinct pubescent-punctures in a transverse line just behind the anterior depressed area; mandibles robust, strongly arched inwardly, pointed at the apex, hollowed at the inner face, with a large tooth on the lower side near the middle; maxillary palpi with 1st segment very slender and very much shorter than any one of the three followings, 2nd somewhat thickened at the apex and slightly curved, 3rd nearly truncate-obconical and much thicker but more or less shorter than the 2nd, 4th longest and very strongly thickened in subovalshape with apex truncated; labial palpi with 1st segment extremely smaller than any one of the two succeedings, 2nd somewhat thickened terminally and slightly curved, 3rd broadly oblong and truncated at the apical extremity. Eyes shortly reniform, somewhat emarginate at the inner margin, strongly convex on the surface. Antennæ subfiliform, more or less about half as the body, finely and thickly pubescent at the terminal segments, but more sparsely so at the basal ones and all the segments mixed with some longer setæ respectively; 1st segment strongly thickened, 2nd shortest, 3rd to 6th slender, 7th to 11th more or less distinctly dilated or flattened. Pronotum transversal, strongly convex on the dorsum and truncate-subconical viewed dorsally, somewhat widened in front; front margin nearly straight or slightly sinuate and narrowly bordered, but the border often obsolete at the middle, front corners

strongly angulated, somewhat produced latero-anteriorly and bears a distinct setigerous puncture near each apex, lateral margins sharply ridged, basal angles strongly angulated and bears a distinct setigerous puncture on each tip, basal margin very broadly bordered and gently arched posteriorly. Scutellum comparatively small, semicircular or subquadrate with posterior angles and margin rounded. Elytra elongate, subparallel-sided, wider than pronotum, narrowed and rounded at the apex; dorsum semicylindrically convex, confusedly or irregularly punctate, strongly transversely rugose at the sides; humeri distinctly convex, free from the rugosity; elytral epipleura rather broad at the base, gradually narrowed posteriorly and ended at just before the apex, more or less pubescent-punctate on the surface. Underside: prosternum narrow, much longer than wide, distinctly angulated laterally on each side at or near the middle, strongly dilated laterally behind the coxæ, straight or slightly emarginate at the hind margin, generally coarsely and rugosely pubescent-punctate on the surface; pro-episterna subtrigonate, with front margin more or less arched forwardly; mesosternum rather longer than wide, somewhat constricted on each side, rounded at the hind margin, generally coarsely and rugosely pubescent-punctate on the surface; metasternum rather short but very broad, with a distinct central longitudinal suture, generally more finely and sparsely pubescent-punctate on the other areas; abdomen completely covered by elytra, distinctly pubescent-punctate, with apical margin of the last sternite straight or rather emarginate. Legs rather robust or the reverse, distinctly pubescent-punctate; femora nearly fusiform, somewhat constricted near the apex, unarmed any projection on each underside; tibiæ slender, gradually and weakly thickened terminally, distinctly angularly expanded at the apex, longitudinally sulcate and ridged, not emarginate at the apex, unarmed the spur; tarsi with 1st segment elongate-obtrigonate and longer than each one of the two succeedings but shorter than the latters combined, 2nd nearly obtrigonate with apical margin strongly subtriangularly emarginate, 3rd deeply bilobed, claw-segment nearly clubate and gently curved; claws appendiculate.

Sexual differences generally not remarkable. In *Abirus forluneii* (Baly), the 1st tarsal segment of the two anterior pairs of legs thicker in the male than those corresponding segments of the female.

40. ABIRUS FORTUNEII (Baly). **Fig. 9.**

Dermorrhytis Fortuneii BALY, Journ. Ent. 1 (1861) (N. China).
Dermorrhytis Fortuneii GERMMINGER et HAROLD, Cat. Col. 11 (1874) 3369 (N. China).
Abirus Fortunei FAIRMAIRE, Ann. Soc. Ent. France (6) 9 (1889) 71 (China: Moupin; Corea); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 124 (N. China); WEISE, Tijdschr. v. Ent. 65 (1922) 51–52 (China: Fukien); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1271 (N. China).
Abirus fortunei CHEN, Sinensia, Acad. Sinica 3 6 (1935) 260–262 (China: Nanking, Tanyang, Wusih, and Shanghai in Kiangsu, Hangchow in Chekiang, Kiangsi, Kien-Tchen in Fukien, Moupin in Szechuan, Kweichow; Korea); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 820 (China: Kiangsu, Nanking, Tanyang, Wusih, Shanghai, Hangchow, Kiangsi, Kien-Tchen in Fukien, Moupin, and Kweichow); CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 31 (Formosa: Alikang, Hoozan, Taihorin, and Kosempo).

Body elongate, subcylindrical, with prothorax narrower than elytra; moderately thickly clothed on the whole surface with fine but rather long grayish pubescence which are erect on the dorsum and suberect or adpressed on the underside, these pubescence generally arose from the punctures, and on the pronotum and elytra (which are furnished with two kinds, coarser and smaller, punctures) the pubescence arose the smaller punctures and not so from the coarser ones, but on the areas all the punctures setigerous. General color varies from metallic green with golden or brassy or cupreous lustre to æneous, dark blackish æneous, cupreous, violaceous or purplish; underside rather darker, often bluish green or greenish blue with brassy or cupreous lustre, sometimes dark violaceous; legs more or less similarly colored as the elytra, with claws reddish brown together with the apical part of claw-segment antennæ black, violaceous black, bluish black, etc. in general coloration, with three basal segments and sometimes the 4th segment partly yellowish brown or reddish brown to red or rufo-piceous, but the 1st segment more or less tinged like the general color on the inner and upper faces; labrum piceous to

FIG. 9. *Abirus fortuneii* (Baly).

black, with marginal area yellowish to light or dark reddish brown and the median area generally tinged like the ground color; mandibles dark reddish brown to pitchy black, with each latero-basal area often tinged like the general color; palpi yellowish brown to reddish brown, with each apical segment more or less infuscated.

Head strongly and rather thickly punctate, convex on the vertex and frons, frons with median area lightly convex or nearly flat and without central longitudinal impression; clypeus not distinctly separated from frons, generally more thickly punctate than on the frons, with the front margin more thickly punctate and gently emarginate. Antennæ subfiliform, rather longer than half the length of body, with terminal segments very thickly pubescent, but the basal ones more sparsely so; 1st segment strongly thickened and somewhat curved, 2nd very much shorter than any one of the others, thickest at a little before the apex and thence thinned both extremities, 3rd to 6th slender and each one gently dilated terminally, 7th to 11th somewhat distinctly dilated and thickened, with apex of the 11th bluntly pointed, and the rough order of the length of these segments are as follows: 11≒7≒5≒1≒10≒6≒9≒3≒8≒4>2, but this order is not decisive one excepted the case of 2nd segment. Pronotum transversal, but not much broader than long, narrowed posteriorly; front margin gently sinuate and very narrowly bordered, the border sometimes more or less obsolete at the median part, front corners angularly produced latero-anteriorly and bears a setigerous puncture near each apex, lateral margins sharply ridged and somewhat angularly rounded near the middle, basal angles distinct and bears a setigerous puncture on each tip, basal margin very broadly bordered, thickly pubescent-punctate and gently arched posteriorly; dorsum strongly transversely convex, more or less thickly covered with coarser and smaller punctures as mentioned above. Scutellum nearly subquadrate, with latero-posterior angles rounded and apical angle obtusely angulated or rounded, with some small pubescent-punctures on the surface. Elytra strongly elongate, distinctly wider than pronotum, slightly narrowed posteriorly or nearly parallel-sided, distinctly narrowed and rounded at the apex; dorsum semicylindrically convex, thickly covered with coarser and smaller punctures as mentioned above, the coarser (non-setigerous) punctures partly arranging in regular longitudinal rows and the smaller (setigerous) punctures also arranging in rather

regular or irregular rows between the rows of coarser punctures, interspaces of these punctures behind each humerus very strongly transversely rugose as far as to near the apex and sometimes these rugosities extend far inwards to near the suture; humeri distinctly elevated, free from the coarser (non-setigerous) punctures, but more or less covered by the smaller (setigerous) punctures and moreover thickly covered with very fine simple punctures under a strong lens. Underside: prosternum much longer than wide, very narrow, angulated laterally on each side just before the middle, strongly dilated laterally behind the coxæ, very slightly emarginate at the hind margin, coarsely, thickly and rugosely pubescent-punctate on the surface; pro-episterna with front margin rather distinctly arched forwardly; femora unarmed beneath; middle and hind-tibiæ not emarginate at the apex; claws appendiculate.

Male.—1st tarsal segment of the two anterior pairs of legs with lateral margins gently arched outwardly; elytra slightly narrowed posteriorly.

Female.—1st tarsal segment of the two anterior pairs of legs with lateral margins straight or very slightly emarginate; elytra nearly parallel-sided.

Length.—♂, 6.0 to 8.0 mm; ♀, 7.0 to 8.5 mm.

Food-plant.—Mulberry tree in China (after S. H. Chen, 1935).

Local distribution.—Rônô, Heitô-Gun, Takao-Syû (1 ♂, May 4, 1908, I. Nitobe leg.).

Alikang, Hoozan, Taihorin, and Kosempo (after M. Chûjô, 1938).

General distribution.—China, Korea, and Formosa.

Genus xv. ABIRELLUS novum

Body elongate, subcylindrical, parallel-sided, with pronotum, scutellum and elytra glabrous, but the other areas more or less pubescent.

Head with upper area strongly swollen and visible from above, not sulcate or excavate on each side of frons; frons with a central longitudinal impression on the anterior area; clypeus broad, separated from frons by a very shallow transverse depression, with the front margin gently emarginate at the middle and somewhat angulate on each side of the emargination. Mouth-parts: labrum transverse, with the front margin rounded and finely pubescent, dorsum nearly flat or slightly transversely convex, somewhat bends downwardly at the anterior marginal

area and bears a transverse row of some punctures, which included a distinct seta in each, before the anterior bended area; mandibles robust, strongly arched inwardly, acuminated at the apex, hollowed at the inner face, with a large tooth on the middle of the lower margin; maxillary palpi moderate to rather robust, with 1st segment cylindrical and very much smaller than any one of the three followings, 2nd subclubate and somewhat curved, 3rd rather thickened terminally and generally shorter than either the 2nd or 4th, 4th strongly thickened, thickest at a little beyond the base and thence thinned to both extremities with the apex truncated; labial palpi rather slender, with 1st segment very much shorter than any one of the two succeedings, 2nd subclubate and somewhat curved, 3rd thickest at a little beyond the base and thence thinned to both extremities with the apex truncated. Eyes rather small, shortly reniform with the inner margin gently emarginate and distinctly convex on the surface. Antennæ subfiliform, about half as long as the body, accepted at the basal parts between the mouthparts and the anterior area of pro-episterna when in repose, very finely and more or less thickly pubescent mixed with some longer setæ on each; 1st segment strongly thickened, 2nd shortest, 3rd to 6th slender, these six basal segments more sparsely pubescent than the five followings, which are somewhat dilated and thickened. Pronotum nearly as wide as it is long, narrowed posteriorly, gently rounded on each side before the middle and nearly obliquely straight behind, very strongly transversely convex on the dorsum with a more or less distinct depression on each side behind the middle; front margin nearly straight and distinctly bordered on each side, front corners strongly produced anteriorly and bears a setigerous puncture near each apex, lateral margins sharply ridged, basal angles distinct and bears a setigerous puncture on each tip, basal margin distinctly bordered and markedly arched posteriorly at the median area. Scutellum elongate, parallel-sided, narrowed at behind, angulated at the apex, impunctate or with a few fine punctures on the surface. Elytra strongly elongate, much wider than pronotum, parallel-sided, narrowed and rounded at the apex; dorsum semicylindrically convex, fairly closely punctate, the punctures forming partly regular and irregular longitudinal double rows, with a very faint transverse depression behind the basilar area and post-humeral areas assuming a weak tendency to form rugosities; humeri

distinctly elevated and free from the large striated punctures; elytral epipleura narrow but distinct, gradually narrowed posteriorly and disappeared near the apex, impunctate and smooth on the surface. Underside; prosternum narrowly elongate, somewhat angulated laterally on each side at middle, distinctly dilated laterally behind the coxæ, somewhat emarginate at the posterior margin, very coarsely and rugosely pubescent-punctate on the surface; pro-episterna coarsely and rogusely pubescent-punctate, with the front margin strongly arched forwardly; mesosternum rather longer than wide, with the posterior area strongly bended dorsally in a subtriangular lobe, coarsely and rugosely pubescent-punctate; metasternum finely but rather sparsely pubescent-punctate, with a distinct central longitudinal suture; abdomen completely covered by elytra, rather strongly and thickly pubescent-punctate, with apical margin of the last sternite gently emarginate at the middle. Legs moderate in length and thickness, distinctly pubescent-punctate; femora fusiform, somewhat constricted near the apex, neither sulcate nor armed with tooth on each underside; tibiæ gradually thickened terminally, abruptly angularly dilated at the apex, longitudinally sulcate and ridged, unarmed the spur; tarsi broad, with 1st segment elongate, nearly obtrigonate and nearly equal in length to the two succeedings together, 2nd nearly obtrigonate and deeply triangularly notched at the apical margin, 3rd deeply bilobed, claw-segment subclubate and somewhat curved; claws appendiculate.

Male.—Fore-tarsi with 1st segment dilated in elongate subquadrangular, triangularly notched at the apical margin, very much wider than those corresponding segments of the female.

The present new genus is nearly allied in one glance to the members of genera *Chrysochus* Redtenbacher or *Chrysochares* Morawitz, but may easily be distinguished from them by the head without distinct sulcus on each side of the frons, and in this character, together with several other characters, the present genus having a resemblance to the genus *Colaspoides* Laporte, but differs from it by the body more elongate, the pronotum not transverse and much narrower than the elytra and the antennæ with terminal segments rather markedly dilated. In many characters, this new genus is most nearly related to the genus *Abirus* Chapuis, but may be separated from it as shown in the above mentioned Key.

41. ABIRELLUS CYLINDRICUS (Chûjô). Fig. 10.

Chrysochus cylindricus Chûjô, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 35–36 (Formosa: Hoozan and Hori).

Genotype: *Abirellus cylindricus* (Chûjô).

Range: Formosa.

General color violaceous blue or metallic green, iwth antennæ (excepted the four basal segments which are reddish brown) black, labrum and mandibles dark reddish brown or piceous, palpi deep yellowish brown, tibiæ blackish in general, but more or less influenced by the general color, tarsi dark brown to blackish, with claws deep yellowish brown to reddish brown together with the apical part of claw-segment; the green-colored specimen with a strong golden cupreous shimmer on the lateral and posterior areas of dorsum; the violaceous blue specimen with abdomen (excepted the 1st sternite) dark reddish brown.

FIG. 10. *Abirellus cylindricus* (Chûjô).

The general shape and structure as in the generic description. Head coarsely pubescent-punctate, the punctures thicker on the upper part with their interspaces somewhat longitudinally rugose, very narrowly and shallowly grooved on each side touched to the upper margin of eye. Antennæ with 3rd segment more than twice as long as the 2nd and also distinctly longer than the 1st, 4th rather shorter than the 1st, 5th slightly shorter than the 3rd but distinctly longer than the 1st, 6th nearly equal in length to the 1st, 7th slightly shorter than the 3rd but longer than the 5th and somewhat longer than he 8th, 8th nearly equal in length to each one of the 9th and 10th, 11h nearly elongate oblong and subequal in length to the 7th. Pronotum coarsely, deeply and irregularly punctate on the dorsum, with interpaces of these punctures more finely but not thickly punctulate. Elytra with interstices of the longitudinal rows of large punctures finely and rather thickly punctulate throughout together with humeri.

Length.— ♂, 6.50 to 6.75 mm; ♀, 7.50 to 7.75 mm.

Local distribution.—Hoozan and Hori (after M. Chûjô, 1938).

General distribution.—Formosa.

Tribe IX. MYOCHROINI

Myochroinæ Baly, Journ. Ent. 2 (1865) 433.
Myochroites Chapuis in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 314.

Myochroitæ Lefèvre, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 117.
Myochroini Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 459.
Adoxini Chen, Sinensia, Acad. Sinica 5–6 11 (1940) 486–492 (pars).

General characters.—Body subcylindrical, oblong, oblong-ovate or subquadrate-ovate, clothed with hairs or scales. Head deeply inserted in prothorax, invisible or scarcely visible from above. Antennæ subfiliform or with strongly dilated terminal segments. Pronotum with distinct lateral margins. Elytra not rugose on each side. Prosternum often provided with grooves at the sides for lodging the antennæ when in repose. Pro-episterna with front margin arched forwardly. Middle- and hind-tibiæ entire or notched on the outer side near the apex. Claws appendiculate.

This tribe includes 22 genera, of which the two following relates to the Formosan fauna and are divided as follows:

Key to the genera

a. Body covered with setæ or pubescence, middle- and hind-tibiæ not emarginated near the apex ..... *Acrothinium* Marshall
a'. Body covered with scales, middle- and hind-tibiæ distinctly emarginated on the outer side near the apex ..... *Pachneophorus* Redtenbacher

Genus xvi. ACROTHINIUM Marshall

Acrothinium Marshall, Proc. Linn. Soc. London 8 (1864) 47; Baly, Journ. Ent. 2 (1865) 441; Chapuis in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 315; Lefèvre, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 117; Jaboby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 459, 461; Chen, Sinensia, Acad. Sinica 3 6 (1935) 233, 202–263; l. c., XI, 5–6 (1940) 489.
Genotype: *Acrothinium gaschkevitchii* (Motschulsky), Etud. Ent. 9 (1860) 23 (*Chrysochus*) from Japan [Fixed by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 461].
Range: Japan, Formosa, China, Burma, and India.

General characters.—Body subquadrate-ovate, oblong-ovate or oblong, with elytra much wider than pronotum, dorsal surface rather sparsely clothed with erect or suberect long setæ and underside also rather sparsely clothed with adpressed robust pubescence; all the known species metallic in coloration.

Head broad, perpendicularly placed to the longitudinal axis of body, deeply inserted in prothorax, almost or completely invisible from above, generally with a central longitudinal impression or groove, not sulcated above the eyes; clypeus not distinctly separated from frons, widened anteriorly, with front margin rather weakly but very widely emarginated. Mouthparts: labrum transverse subquadrate, nearly or completely parallel-sided, rounded and furnished with a few setæ at the front corners, lightly emarginated at the front margin, flat on the surface with medio-anterior marginal area strongly emarginate-depressed and a setigerous puncture on each side of the middle of the anterior end of flat area; mandibles robust, strongly arched inwardly, acuminated at the apex, deeply concave at the inner face with a very large tooth beyond the middle of its lower margin and a weak angulation on the middle of upper margin; maxillary palpi rather robust and long, with 1st segment very much smaller than any one of the three succeedings, 2nd and 3rd very strongly thickened from the base to apex respectively and somewhat curved, 4th largest and elongate-oval with apex distinctly truncated; labial palpi also rather robust and long, with 1st segment extremely smaller than any one of the two followings, 2nd strongly thickened terminally and somewhat curved, 3rd nearly elongate-oval with apex truncated. Eyes rather small, nearly rounded, distinctly convex, with inner margin slightly emarginated. Antennæ about half or rather more than half as long as body, finely pubescent, with 1st segment strongly thickened, 2nd to 6th slender, 7th to 11th distinctly dilated and more or less compressed. Pronotum somewhat wider than long, transversely convex, lateral and basal margins distinctly bordered and more or less rounded. but front margin nearly straight seen from above and immarginated with the exception of the lateral ends, front and basal margin furnished with a setigerous puncture on each lateral extremity, front corners strongly produced forwardly, basal corners somewhat expanded laterally. Scutellum much longer than wide, gently narrowed posteriorly, rounded at the apex. Elytra subquadrate, longer than wide, much wider at the base than pronotum, narrowed and rounded at the apex and they completely cover the abdomen, strongly convex on the dorsum, the basal area somewhat raised and bounded below by a transverse depression, with humeri strongly elevated and lateral margins distinctly expanded; elytra epipleura nearly horizontally placed,

distinct from the base to latero-apical corner of elytron and pubescent-punctulate on the surface. Underside: prosternum broad, but much longer than wide, widened posteriorly, nearly straight at the hind margin; pro-episterna with front margin arched forwardly; mesosternum subquadrate between the middle-coxæ, with hind margin straight or emarginate-depressed at the middle; metasternum strongly transverse, with a distinct central longitudinal suture. Legs moderate-sized; femora thickened medially, constricted near the apex, gently angulate on the underside near the middle (fore-femora) or beyond the middle (middle- and hind-femora); tibiæ slender, longitudinally sulcated and ridged, strongly abruptly widened on the outer side at the apex, armed with a pair of spur at the apex of the lowerside of middle- and hind-tibiæ; tarsi with two basal segments subtrigonate and longitudinally sulcate on the middle of dorsum respectively, 3rd segment very deeply bilobed, claw-segment strongly elongate, weakly clubate and gently curved; claws distinctly appendiculate.

Male.—First tarsal segment of the two anterior pairs of legs somewhat dilated.

42. ACROTHINIUM GASCHKEVITCHII (Motschulsky). **Fig. 11**

Chrysochus Gaschkevitchii MOTSCHULSKY, Etud. Ent. 9 (1860) 23 (Japan); Bull. Soc. Hist. Nat. Moscou 1 39 (1866) 176 (Japan).

Acrothinium Gaschkevitchii BALY, Trans, Ent. Soc. London (1874) 164 (Japan); GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3390 (Japan); LEWIS, Cat. Col. Japanese Archipel. (1879) 28 (Japan); SCHÖNFELDT, Cat. Col. Japan (1885) 146 (Japan: Hiogo, etc.); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 126 (Japan and N. China); WINKLER, Cat. Col. Reg. Palaearcticæ 11 2 (1930) 1271 (Japan and China).

Acrothinium Gaschkevitchii HEYDEN, Deutsche Ent. Zeitschr. 2 23 (1879) 362 (Japan: Echizen and Mino).

Acrothinium gaschkevitchi JACOBY, Proc. Zool. Soc. London (1885) 753 (Japan); TAKEUCHI, Trans. Kansai Ent. Soc. 2 (1931) 69 (Japan: Is. Yakushima); MIWA, Syst. Cat. Formosa Col. (1931) 188 (Formosa: Taihoku and Shinchiku); CHEN, Sinensia, Acad. Sinica 3 6 (1935) 263–264, *f. 12* (China) BABA, Sizen-Kenkyu 5 (1936) 74 (Japan: Is. Sado); YAMAMOTO, Kagaku-no-Nogyo 4 17 (1937) 122 (Japan: Is. Sado); CHÛJÔ, Trans. Nat. Hist. Soc. Formosa 171 27 (1937) 272 (Japan: Is. Sado-gasima); l. c. (1937) 277 (Japan: Is. Awa-sima); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 821 (China); CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 31–32 (Formosa: Taihorin, Kosempo, and Sokutsu in Banshoryo-Distr.); Bull. Umeno Ent. Lab. 6 (1938) 7 (Japan: Oita); Kontyu, Ent. Soc. Nippon 2 14 (1940) 73 (Japan: Mikazuki and

Kodakusa, both in Koti-Si, Koti-Ken, Sikoku); NAKANE, Ent. World 96 10 (1942) 77 (Japan: near Lake Noziri-ko); CHÛJÔ, Bull. Tohoku Ent. Soc. 3 2 (1950) 27 (Japan).

Acrothinium Goszkerwiczi JACOBSON, Käf. Russlands u. west-europas (1916) *pl. 57, f. 4.*

Acrothinium gaschkevitchii YUASA in Icon. Ins. Japonicorum (1932) 601, *f. 1175* (Japan, Formosa, and N. China); KAMIYA, Akitu, TAKEUCHI, Ent. Lab. 3 1 (1938) 95 (Japan: Is. Yakushima); FUKUDA, Ent. World 57 6 (1938) 834 (Japan: Aomori-Ken); ESAKI, HORI et Yasumatsu, Ins. Japonicorum, Illustr. Icon. Color. Nat. Depicta (1939) 296, *pl. 134, f. 521–1* (Japan, Formosa, China, Siberia, and E. India).

Body oblong-ovate. General color metallic green or bluish green; upper area of head, pronotum, scutellum and marginal area of each elytron with a strong cupreous or golden shimmer; elytra bright red with exception of the marginal area cited as in above, the red area bounded by cupreous red and including a blue-green longitudinal stripe in the middle and the latter stripe bounded by violaceous red; mouth-parts and antennæ yellowish brown to blackish brown or piceous, with apices of mandibles and five terminal segments of antennæ always black and palpi lighter (excepted the whole or a part of the last segment of maxillary palpi infuscated); tibiæ and tarsi black, tibiæ with a slight metallic blue or greenish blue shimmer, claws light or dark yellowish brown or reddish brown.

FIG. 11. *Acrothinium gaschkevitchii* (Motschulsky).

Head: vertex convex, strongly rugosely punctate; frons lightly convex, with a shallow depression on the medio-anterior area which is weakly longitudinally grooved in the middle, very strongly and rather sparsely or thickly punctate, the punctures very deep and including an erect or suberect setæ in each; clypeus nearly trapezoidal or subtrigonate, not distinctly separated from frons, somewhat widened anteriorly, widely but not deeply emarginated at the front margin, flat on the surface, punctate as those on the frons but the punctures rather smaller. Antennæ extending to a little beyond the base of elytra when

turned them back, with 1st segment very strongly thickened and somewhat curved, 2nd to 6th slender, 2nd nearly reniform and very much shorter than any one of the others, the four succeedings gradually diminishing their length terminally, 7th to 11th distinctly dilated but much longer than wide, somewhat compressed, 7th longest, 8th to 10th nearly equal in length to each other but gradually diminishing their width terminally, 11th rather narrower but longer than the 10th, 7th to 10th more or less widened terminally in each, but 11th bluntly pointed or rounded at the apex. Pronotum somewhat wider than long, rather wider at the anterior extremity than at the base, with sides gently rounded, basal margin rather widely bordered and gently arched posteriorly; dorsum very strongly transversely convex, with anterior corners especially strongly deflexed, very strongly, deeply and rather sparsely or thickly punctate, each puncture furnished with a long and erect or suberect grayish seta. Scutellum much longer than wide, more or less narrowed posteriorly and rounded at the apex, flat or lightly convex and finely shagreened on the surface, sparsely or thickly punctate, the punctures furnished with a suberect grayish seta in each. Elytra elongate-subquadrate, much wider at the base than pronotum, narrowed and rounded at the apex; dorsum strongly convex, with basal area somewhat raised and transversely depressed behind the raised area, very strongly, deeply and thickly punctate, the punctures arranged in rather regular or irregular longitudinal rows, interspaces of these punctures irregularly clothed with smaller punctures which bear a grayish erect seta in each. Underside: pro- and mesosternum finely shagreened, coarsely and rugosely pubescent-punctate; pro-episterna with front margin arched forwardly; metasternum sparsely pubescent-punctate, the punctures very large on each side but small on the middle; abdomen strongly and thickly pubescent-punctate, each sternite bears a long seta on each side of the middle.

Male.—1st tarsal segment of the two anterior pairs of legs somewhat thicker and wider than those corresponding segments of female.

Length.—♂, 5.5 to 6.0 mm; ♀, 6.5 to 7.5 mm.

Food-plant.—*Vitis vinifera* Linn. (Japanese name: *Budô*); some wild-species of the genus *Vitis* Linn.; *Mentha arvensis* Linn. var. *vulgaris* Benth. (Japanese name: *Hakka*); *Commeliana communis* Linn. (Japanese name: *Tuyukusa*); *Corylopsis spicata* Sieb. et Zucc. (Japanese name: *Tosamiduki*).

Local distribution.—Mt. Sô-zan, Sitisei-Gun, Taihoku-Syû (1 ♀, April 29, 1932; 1 ♂, May 24, 1936; M. Chûjô leg.); Taihoku-Si, Taihoku-Syû (1 ♂, April 9, 1933; 1 ♂, April 25, 1934; 2 ♀ ♀, May 10, 1936; 1 ♂ and 1 ♀ April 25, 1937; 1 ♀, May 1, 1937; 1 ♂, April 23, 1938; Chûjô leg.); Giran-Gai, Giran-Gun, Taihoku-Syû (1 ♀, July 10, 1935, Y. Fuzioka leg.).

Taihoku and Shinchiku (after Y. Miwa, 1931); Taihorin, Kosempo and Sukutsu in Banshoryo-Distr. (after M. Chûjô, 1938). Is. Miyako-zima in Loo-Choo Archipelago (1 ♂, April 22, 1941, R. Matuda leg.).

General distribution.—Japan, Loo-Choo, Formosa, and China.

This species is hitherto unknown from Loo-Choo Archipelago.

Genus xvii. PACHNEOPHORUS Redtenbacher

Pachneophorus REDTENBACHER, Gatt. Deutschen Käferf. (1845) 117; Fauna Austriaca, ed. 1 (1849) 569; BALY, Journ. Ent. 2 (1865) 436; Trans. Ent. Soc. London (3) 4 (1867) 94; FAIRMAIRE in Jacquerin Du Val, Gen. Col. d'Europe 4 (1868) 223; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 323; WEISE, Naturg. Ins. Deutschlands 6 (1882) 282; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 123; BEDEL, Faune Col. Bassin Seine 5 (1892) 136, 137; EVERTS, Col. Neerlandica 2 (1903) 392, 426; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 459, 460; REITTER, Fauna Germanica 4 (1912) 104, 106; KUHNT, Iluustr. Best. Tab. Käf. Deutschlands (1913) 804, 834; SCHAUFUSS in Calwer, Käferbuch, ed. 6 2 (1913) 924, 1907–1916; SCHEERPELTZ et WINKLER in Brohmer, etc., Tierwelt Mitteleuropas 2 5 (1930) 12–223; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 233, 277-278; 1. c. 5–6 11 (1940) 489.

Genotype: *Pachneophorus pilosus* (Rossi), Fauna Etrusca 1 (1790) 100 (*Cryptocephalus*) from Italy [Fixed by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 460].

Range: Europe, Asia, Africa, and Madagascar.

General characters.—Body elongate, nearly cylindrical or narrowly oblong, sparsely or thickly clothed with adpressed and bifidate scales or scalelike setæ, frequently intermixed with the true pubescence partially.

Head inclined downwardly, deeply engaged in prothorax, hardly or rather distinctly visible from above, thickly and strongly punctate; vertex and frons very wide, gently convex, generally flat or more or less depressed between the eyes, not sulcated above the eyes; clypeus confused with frons, emarginated at the middle of front margin and strongly rounded or

angulated on each side of the emargination. Mouth-parts: labrum transverse subquadrate, parallel-sided or rather narrowed anteriorly, rounded at the front corners with a few setæ on each posterior portion, finely pubescent at the front margin together with a part of front corners and emarginated at the middle, flat on the surface with anterior marginal area somewhat emarginate-depressed; mandibles robust, strongly arched inwardly, acuminated at the apex, hollowed at the inner face with a strong angulation on the middle of upper margin and a large tooth beyond the middle of lower margin; maxillary palpi slender, with 1st segment very much smaller than any of the three followings, 2nd nearly equal in thickness at the base to the 1st but very strongly thickened terminally and somewhat curved, 3rd a little thickened terminally and rather shorter than the 2nd, 4th much longer than the 3rd, gradually acuminated terminally and truncated at the apical extremity; labial palpi also slender, with 1st segment minute, 2nd very strongly thickened terminally, 3rd longer than the 2nd, acuminated terminally and truncated at the apical extremity. Eyes small, placed on each side of the face, subrotundate, distinctly convex, with inner margin somewhat emarginated. Antennæ short, about half or rather more than half the length of body, finely pubescent, with 1st segment clothed with some scales or scale-like setæ, strongly swollen and largest, 2nd narrowly elongate and somewhat arched, 3rd to 6th slender and each one of them more or less shorter and thinner than the 2nd, 7th to 10th triangularly dilated respectively and longer than wide or the reverse, 11th ovate or oblong and distinctly wider and longer than the 10th. Pronotum subquadrate, nearly as wide as it is long, wider at the anterior extremity than the base, widest at only a little behind the anterior end and markedly narrowed posteriorly from there, very strongly transversely convex and strongly and thickly punctate on the dorsum; front margin immarginated with lateral end somewhat produced forwardly bears a setigerous puncture on each, lateral margins sharply ridged, basal corners nearly rectangular and bears a setigerous puncture on each, basal margin not bordered and gently arched posteriorly. Scutellum rather variable in shape, elongate-quadrate, obtrigonate, obpentagonal, etc. in outline. Elytra strongly elongate with a gentle curvature on each side, narrowed and rounded at the apex and they entirely cover the abdomen, much wider at the base than pronotum, strongly convex on the dorsum,

very strongly punctate in eleven longitudinal rows (including a short scutellar and an external marginal row) on each elytron, the punctures become smaller posteriorly, often clothed with scalelike setæ or true pubescence besides the general scales, the scales sometimes forming here and there ill-defined patches; humeri somewhat raised in a small area, elytra epipleura oblique and distinct from the base to near the latero-apical corner of elytron. Underside: prosternum large, much longer than wide, more or less constricted between the fore-coxæ, deeply grooved on each side for the reception of antennæ when in repose, widened posteriorly, nearly straight at the hind margin but somewhat produced posteriorly on each side; pro-episterna with front margin more or less distinctly arched forwardly; mesosternum transverse-quadrate between the middle-coxæ; mesopleura generally not clothed with scales or pubescence; metasternum short but very broad, without the central longitudinal suture; abdomen with 1st sternite very large and rather longer than the three followings combined together, 5th with lateral and apical margins commonly rounded and much longer than any one of the three precedings but much shorter than the 1st. Legs moderately robust; femora somewhat incrassate medially, constricted near the apex and unarmed the denticle or tooth on the underside; tibiæ slender, slightly thickened terminally, longitudinally ridged and sulcate, unarmed the spur, middle- and hind-tibiæ deeply notched on the outer side near the apex; tarsi with 1st segment elongate-subtriangular, 2nd also subtriangular or nearly semicircular and rather shorter than the 1st, 3rd very deeply bilobed and longer than any one of the 1st and 2nd, claw-segment strongly elongate, clubate and somewhat curved; claws simple or appendiculate.

Key to the species

1. Body elongate-oblong; head with inter-ocular area more or less strongly and widely depressed, pronotum rather wider than long, scutellum nearly obtrigonate or obpentagonal, elytra with straited punctures not so large and by the reason the interstices of those striæ comparatively broad, scales on the elytra very broad and thickly covering the whole surface ..... *formosanus* Chûjô

1'. Body subcylindrical, narrowed at behind; head with interocular area slightly depressed on the middle in a small area, pronotum rather longer than wide, scutellum elongate-subquadrate, eleytra with striated punctures very large and their interstices narrow, scales on the elytra narrow and covering only the interstices of the punctured striæ ..... *sauteri* Chûjô

43. PACHNEOPHORUS FORMOSANUS Chûjô.

Pachneophorus formosanus Chûjô, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 32 (Formosa: Hoozan, Anping, and Tainan).

Body elongate-oblong. General color piceous to black, with bronzy or cupreous shimmer; mouth-parts (excepted the bases of mandibles which are concolorous with the general color), antennæ and legs (excepted the coxæ and trochanters which are concolorous with the general color) dark yellowish brown or reddish brown.

Head: vertex and frons commonly somewhat convex, finely shagreened, with a central longitudinal impressed-line on the middle of frons and a broad transverse depression between the eyes, strongly and rather thickly punctate, thickly clothed with white bifid scales; clypeus forming two, anterior and posterior, slopes from the inter-antennal portion, emarginated at the front margin, with posterior area clothed with white scalelike setæ and anterior area grayish or whitish pubescent. Antennæ shorter than half as long as body, finely pubescent; 1st segment very strongly thickened and furnished with some white bifid scales on the upper face, 2nd much thicker and longer than the 3rd and distinctly curved, 3rd to 6th slender and flat, 3rd nearly equal in length to the 5th and rather longer than the 4th, 6th nearly equal in length to, but slightly wider than, the 4th, each one of the 7th to 10th triangularly dilated terminally, rather thickened, longer than wide, loosely articulated to each other, 11th nearly ovate or oblong-ovate in outline, somewhat thickened and much longer and wider than the 10th. Pronotum subquadrate, rather wider than long, widest at a little beyond the middle, the sides obliquely diverging from the base to a little beyond the middle and thence rounded and converging to the apex; dorsum very strongly transversely convex, very strongly and thickly punctate, thickly clothed with white and pale brownish bifid scales. Scutellum longer than wide, nearly obtrigonate or obpentagonal, more or less convex on the surface, entirely or basally shagreened with a few punctures on the basal area. Elytra much longer than wide with lateral margins rounded, much wider at the base than of pronotum, narrowed and rounded at the apex; dorsum distinctly convex, with a weak transverse depression behind the basal area, strongly striate-punctate as usual, thickly and irregularly clothed with white and pale brownish bifid scales. Underside strongly and thickly punctate, clothed with white bifid scale-

like setæ (which are most robust on the pro- and metasternum) on each side, whitish or grayish very narrow scalelike setæ on the middle; legs clothed with whitish bifid scalelike setæ, apical areas of tibiæ and most part of tarsi clothed with true pale brownish pubescence; claws appendiculate.

Length.—♂, 2.5 mm; ♀, 3.0 mm.

Local distribution.—Rimogan, Bunzan-Gun, Taihoku-Syû (1 ♀, July 22, 1929, Y. Miwa leg.); Mt. Hinoki-yama, Bunzan-Gun, Taihoku-Syû (1 ♂, July 29, 1929, Y. Miwa leg.); Heitô, Heitô-Gun, Takao-Syû (1 ♂, August 19, 1932, Y. Miwa leg.).

Hoozan, Anping, and Taihan (after M. Chûjô, 1938).

General distribution.—Formosa.

44. PACHNEOPHORUS SAUTERI Chûjô.

Pachneophorus sauteri CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 32–33 (Formosa: Kosempo, Anping, Taihan, and Rato).

Body subcylindrical, narrowed at behind. Head, pronotum and scutellum black, with a slight cupreous shimmer; elytra piceous or pitchy red, with a very slight cupreous shimmer; labrum, palpi and 2nd to 6th antennal segments yellowish brown; mandible light to dark reddish brown, with bases black; 1st and the five terminal segments of antennæ dark yellowish brown; underside piceous to black, generally with a very slight cupreous sheen, with last abdominal sternite frequently dark-reddish brown; legs with coxæ and trochanters concolorous with the underside of body, femora and tibiæ dark brown to piceous or black and frequently with a very slight cupreous sheen, tarsi yellowish brown together with apical areas of tibiæ.

Head moderately convex, very finely and strongly shagreened, strongly and thickly punctate, with their interspaces rugose, slightly depressed on the middle of inter-ocular area; vertex and frons covered with white bifid scalelike setæ; clypeus gently longitudinally convex, clothed with white bifid scalelike setæ and emarginated at the front margin. Antennæ sligthly shorter than half the length of body, finely pubescent; 1st segment very strongly thickened and furnished with white bifid and very narrow scales on the upper face, 2nd much thicker and longer than the 3rd and markedly curved, 3rd to 6th flat and slender, 3rd nearly equal in length to, but rather narrower than, the 5th, nearly equal in length to, but distinctly narrower than, the 6th and shorter than the 3rd, each one of the 7th to 10th subtriangularly dilated terminally, longer than wide and loosely

articulated to each other, 11th nearly ovate or oblong-ovate and much longer and wider than the 10th. Pronotum subquadrate, rather longer than wide, widest at a little beyond the middle, diverging from the base to a little beyond the middle and then rounded and converging to the apex; dorsum very strongly transversely convex, thickly foveolate-punctate, the punctures rather more feeble and sparse on the middle than on each side, rather thickly or sparsely clothed with dirty white bifid scalelike setæ. Scutellum elongate-subquadrate, with a few fine punctures on the surface. Elytra elongate, much wider at the base than of pronotum, narrowed and rounded at the apex; dorsum distinctly convex, with basilar area lightly raised, very strongly foveolate-punctate in eleven longitudinal rows on each elytron as usual, interstices of these regular rows of punctures narrow and clothed with dirty white bifid and rather narrow scales. Underside coarsely and rather thickly punctured, covered with white bifid scalelike setæ together with legs; legs with apical areas of tibiæ and most part of tarsi pale brownish pubescence, claws appendiculate.

Length.—♂, 2.5 mm; ♀, 3.0 mm.

Local distribution.—Kosempo, Amping, Tainan, and Rato (after M. Chûjô, 1938).

General distribution.—Formosa.

Tribe X. TYPOPHORINI

Typophorites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 329.
Typophoritæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 129.
Typophorini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 468.
Modinini CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 486–489 (pars).

General characters.—Body oblong, ovate or rotundate in outline, with dorsum distinctly convex and glabrous, and the other areas more or less pubescent. Head frequently with a broad sulcus above each eye. Antennæ filiform or subfiliform, with terminal segments somewhat dilated. Pronotum more or less narrower than elytra, with distinct lateral margins. Elytra without rugosities at sides. Pro-episterna with front margin arched forwardly. Middle- and hind-tibiæ distinctly emarginated on the outer side near the apex. Claws appendiculate or bifidate.

This tribe contains 30 genera, of which the 2 genera have a relation to our faunistic region and are separated as follows:

Key to the genera

a. Claws appendiculate ..... *Cleorina* Lefèvre
a'. Claws bifidate ..... *Cleoporus* Lefèvre

Genus xviii. CLEORINA Lefévre

Cleorina LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 143; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 468, 482–483; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 233, 281–282; l. c. 5–6 11 (1940) 488.

Genotype: *Cleorina aulica* Lefèvre, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 144 from Java [Synonym of *Cleorina æneomicans* (Baly), Trans. Ent. Soc. London 2 4 (1867) 237 (*Nodostoma*) from Malacca] [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 482].

Range: Oriental Region and a part of Australian Region.

General characters.—Body rotundate or rotundate-ovate, strongly convex on the dorsum, more or less pubescent with exception of the dorsum which is glabrous, generally metallic in coloration.

Head deeply immarsed in prothorax, invisible from above, generally with a short and not very distinct longitudinal furrow on the middle of face; clypeus not separted from frons, with front margin emarginated. Mouth-parts: labrum transverse, with front angles rounded and finely pubescent, front margin gently arched outwardly or nearly straight or slightly emarginated at the middle and finely pubescent, surface flat with anterior marginal area more or less depressed; mandibles robust, arcuated inwardly, acuminated at the apex, hollowed at the inner face and unidentate or uniangulate at the upper end and also lower margins; maxillary palpi rather robust, with 1st segment very much smaller than any one of the three followings, 2nd strongly clubate, 3rd rather thickened terminally and much shorter than the 2nd or 4th, the last one subcylindrical, narrowed at the apical portion and truncated at the tip; labial palpi rather slender, with 1st segment extremely smaller than any one of the two followings, 2nd somewhat thickened terminally, 3rd subcylindrical with apical portion narrowed and apical extremity truncated. Eyes rather large, oblong, weakly emarginated at the inner orbit and partly concealed from view by the thorax. Antennæ filiform, about half as long as body, with 1st segment strongly incrassate, 2nd rather thicker but shorter than the 3rd, the latter and 4th slender, the seven suc-

ceedings somewhat dilated and flattened. Pronotum strongly transverse, somewhat narrowed in front, furnished with a punctures which bears a rather long seta on each side of the front margin closely approximates to the lateral end, straight or gently rounded and distinctly ridged at the lateral margins, tuberculated at the basal corners and furnished with a long pubescence arose from a distinct puncture on the tip, basal margin slightly emarginated on each side of the median area which is arched posteriorly and distinctly bordered, the border widened at the median area; dorsum transversely convex, with a transverse punctate sulcus nearly along the front margin. Scutellum nearly obtrigonate with lateral margins more or less rounded or obpentagonal. Elytra subquadrate, rather longer than wide, somewhat wider at the base than of pronotum, narrowed and rounded at the apex; dorsum strongly convex, regularly straite-punctate, with a transverse impression behind each humerous which is highly raised and free from the striated punctures, basal area weakly developed downwardly on each side of the base, latero-marginal areas narrowly but distinctly reflexed to the dorsal convexture; elytral epipleura broad at the base, but strongly narrowed posteriorly before the middle and then gradually narrowed terminally. Underside; prosterum broad between the fore-caxæ, strongly ridged at the anterior one-third of each lateral margin, strongly widened posteriorly behind the coxæ, distinctly bordered at the front margin, immarginated at the hind margin; pro-episterna very large, with front margin arched forwardly and confounded at the anterior end with anterior angle of pronotum and also at the posterior end with anterior end of the lateral ridge of prosternum; mesosternum strongly transverse rectangular, arched inwardly and narrowly bordered on each side, immarginated at the hind margin; pygidium generally visible from above at the apical area. Legs moderately robust, with each pair widely separated from one another; femora strongly thickened medially, constricted before the apex, unarmed or minutely toothed beneath; tibiæ slender, gently thickened terminally, unarmed the spur, with several longitudinal ridges, two hind pairs distinctly notched on the outer side near the apex; tarsi with two basal segments subtrigonate, 3rd one deeply bilobed, claw-segment clubate and somewhat curved; claws appendiculate.

45. **CLEORINA LEFEVREI** Jacoby. Fig. 12.

Cleorina lefevrei JACOBY, Entomolog. 323 23 (1890) 116 (China: Chang-Yang); Fauna Brit. India. incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 484 (Burma: Ruby Mines); MIWA, Syst. Cat. Formosa Col. (1931) 188 (Formosa: Musha, Horisha, Shinchiku and Arisan); CHEN, Sinensia 3 6 (1935) 282–283 (China: Changyang); Ho in Wu, Cat. Ins. Sinensium 3 (1937) 824 (China: Chang-Yang); CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 33 (Formosa: Koshun, Kosempo, Fuhosho, Taihorinsho, Suisharyo, Tainan, Kankau in Koshun-Distr., Paroe and Chosokei).

Cleorina Lefevrei CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 150 (China: Chang-Yang; Burma).

Body rotundate-ovate, strongly convex on the dorsum. General color bright metallic dark or deep blue, violaceous blue, bluish green, cupreous green or golden green, generally elytra lighter than the pronotum; mouthparts dark yellowish brown to piceous or black; antennæ black, with four basal segments light to dark yellowish brown and the 1st segment metallic dark blue or green above; abdomen metallic blue-black; tibiæ darker than femora, tarsi piceous to black, claws yellowish brown to reddish brown.

FIG. 12. *Cleorira lefevrei* Jacoby.

Head gently convex, and sparsely pubescent-punctate with a very short longitudinal sulcus on the middle of frons, supra-antennal areas somewhat raised and smooth, front margin of clypeus distinctly cleft. Antennæ filiform, more or less longer than half the length of body, with 1st segment strongly incrassate and somewhat curved, 2nd subcylindrical, slightly curved and shortest, 3rd and 4th slender, nearly equal in size to each other, the six succeedings somewhat thickend and rather flattened, 6th to 10th nearly equal in size to each other, 11th nearly spindle-shaped and distinctly longer than the 10th. Pronotum transverse, about twice as wide as it is long, somewhat narrower at the anterior area than the base; front margin gently trisinuate and immarginated, lateral margins ridged and straight at the median area but convergent at the anterior and basal areas, basal margin narrowly bordered and slightly sinuate on each side of the median area which is broadly bordered and arched posteriorly; dorsum transversely convex, strongly and rather thickly punctate, the punctures

stronger on each side and much finer on the medio-basal and medio-anterior areas. Scutellum nearly obpentagonal, slightly narrowed posteriorly, impunctate and smooth. Elytra subquadrate, rather longer than wide, rounded at the apex, distinctly wider at the humeral area than pronotum, strongly convex on the dorsum, each elytron with a faint transverse impression behind the humerus, a strong depression on the other side of humerus and ten regular longitudinal rows (including a short scutellar and an external marginal row) of punctures, the punctures becoming finer posteriorly and also finer on the medio-basal area, but stronger within the post-humeral transverse impression, interstices of these regular rows of punctures not separately convex and bears a regular or irrigular longitudinal row of very fine punctures on each. Underside: prosternum subquadrate between the fore-coxæ, emarginated and ridged on each side, strongly widened posteriorly behind the coxae, immarginated and nearly straight at the hind margin with a small angulation directed posteriorly on the middle, deeply transversely grooved and sparsely pubescent-punctate on a little behind the front border, very strongly foveolate-punctate and sparsely pubescent on the posterior area, nearly impunctate on the middle; pro-episterna very large, arched forwardly at the front margin, rugosely or strigosely punctate on the surface; mesosternum transverse between the middle-coxæ, emarginated and bordered on each side, but the border not reached to the hind margin which is immarginated and weakly tuberculated posteriorly at the middle, rather finely but sparsely pubescent-punctulate along the lateral and hind margins; metasternum finely but very sparsely pubescent-punctulate; abdomen rather thickly pubescent-punctate; pygidium with apical area produced posteriorly and exposed beyond the apex of elytra, very finely shagreened and strongly thickly pubescent-punctate on the surface; fore-femora with an obtuse angulation near the middle of underside, middle- and hind-femora with a denticle much beyond the middle of each underside.

Male.—Antennæ much longer than half the length of body, apical margin of last abdominal sternite emarginated as in ⌒-shape, pygidium with apical area forming ◡-shape, fore-tibiæ thicker at the apical portion than those of female.

Female.—Antennæ only a little longer than half the length of body, apical margin of last abdominal sternite gently emar-

ginated, pygidium with apical area nearly semicircular in shape.

Length.—♂, 2.75 to 3.00 mm; ♀, 3.25 to 3.75 mm.

Food-plant.—*Languas speciosa* (Wendl.) Merr. (Japanese name: *Gettô*).

Local distribution.—Taihoku-Si, Taihoku-Syû (1♂, March 4, 1932; 4♂♂ and 3♀♀, June 19, 1932; 1♀, December 15, 1932; 1♀, May 7, 1933; 1♂ and 1♀, April 25, 1934; 1♀, July, 1936; 1♂, November 15, 1939; M. Chûjô leg.); Rimogan, Bunzan-Gun, Taihoku-Syû (1♂ and 1♀, May 12, 1933; 1♂, April 5, 1940; M. Chûjô leg.); Habun, Bunzan-Gun, Taihoku-Syû (1♂, March 23, 1933, M. Chûjô leg.); Mizuho, Tamazato-Gun, Karenkô-Tyô (1♂, March 23, 1935, M. Chûjô leg.); Tipon, Taitô-Gun, Taitô-Tyô (1♀, March 24, 1935, M. Chûjô leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1♂ and 1♀, June 11, 1937; 1♂, June 12, 1937; 1♀, June 15, 1937; M. Chûjô leg.); Kusukusu, Kôsyun-Gun, Takao-Syû (1♂, June 17, 1937, M. Chûjô leg.); Hatonosawa, Ratô-Gun, Taihoku-Syû (2♂♂, July 22, 1940, M. Chûjô leg.).

Musha, Horisha, Shinchiku, and Arisan (after Y. Miwa, 1931); Koshun, Kosempo, Fuhosho, Taihorinsho, Suisharyo, Tainan, Kankau in Koshum-Distr., Paroe and Chosokei (after M. Chûjô, 1938).

Genus xix. CLEOPORUS Lefevre

Cleoporus LEFÈVRE, Ann. Soc. Ent. France Bull. (6) 4 (1884) 76; Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 137; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 468, 479; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 233, 283–285; 1 c., 5–6 11 (1940) 489.

Genotype: *Cleoporus cruciatus* LEFÈVRE, Ann. Soc. Ent. France Bull. (6) 4 (1884) 76 from Bohol and Mindanao in Philippines [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 479].

Range: Oriental Region; Manchurian and Austro-Malayan Subregions.

General characters.—Body oblong or oblong-oval, glabrous on the dorsum, more or less pubescent on the underside.

Head deflexed, inserted in prothorax up to the hind margin of eyes; vertex strongly convex, deeply and broadly sulcated above the eyes; frons lightly convex, generally with a central longitudinal sulcus; clypeus subquadrate, generally more or less wider than long, more or less distinctly separated from frons by a transverse impression, but sometimes not delimited, gently

excurved on each side, emarginated at the middle of front margin and somewhat angulated anteriorly on each side of the emargination. Mouth-parts: labrum subquadrate, somewhat wider than long, rounded and finely but not thickly pubescent at the front corners, emarginated at the middle of front margin, flat on the surface, with medio-anterior area somewhat depressed; mandibles robust, strongly angularly curved inwardly sharply pointed at the apex, hollowed at the inner face with its upper margin sharply edged and angularly sinuate and lower margin bears a tooth below the apex; maxillary palpi rather slender, with 1st segment shortest and very slender, 2nd nearly equal in thickness at the basal area to the 1st but very strongly thickened terminally and somewhat curved, 3rd somewhat thickened terminally and thicker but only a little longer than the 1st and much shorter than the 2nd or 4th, the latter strongly elongate-conical and truncated at the tip; labial palpi also slender, with 1st segment extremely smaller than any one of the two succeedings, 2nd strongly clubate and somewhat curved, 3rd strongly elongate-conical and truncated at the apical extremity. Eyes oval in outline, with inner margin slightly emarginated, moderately convex. Antennæ filiform, about half or rather more than half as long as body, with 1st segment strongly thickened and somewhat curved, 2nd much thinner than the 1st but thicker than the 3rd and generally shortest, 3rd to 6th slender, 7th to 11th more or less thickened and somewhat flattened, with apex of 11th bluntly or rather sharply pointed. Pronotum transverse, frequently narrowed in front; front margin straight or gently arched outwardly at the middle but excurved on each side and narrowly bordered, the border frequently obsolete at the median part, front angles nearly rectangular but the tip not sharply angulated in general, lateral margins sharply edged and straight or slightly rounded, basal corners nearly rectangular and bears a large setigerous puncture on each tip, basal margin distinctly bordered with median area more or less arched posteriorly; dorsum strongly transversely convex, generally with a row of punctures along all the margins. Scutellum semicircular, subquadrate or subpentagonal, with apical area narrowed. Elytra elongate, wider than pronotum, gently rounded on each side, narrowly rounded at the apex, strongly convex on the dorsum, regularly punctate-striate, with humeri distinctly raised and free from the striated punctures; elytral epipleura obliquely or nearly horizontally placed to the

dorsal convexture, not very broad but distinct, gradually narrowed posteriorly and extended from the base to near the apex, with surface impunctate and smooth. Underside: prosternum subquadrate between the fore-coxæ, generally longer than wide, more or less slightly narrowed at the middle, strongly widened posteriorly behind the coxæ, straight or emarginated on each side of the middle at the hind margin, pro-episterna strongly developed forwardly, with front margin arched forwardly, straight or gently sinuate, front corner more or less converging, or just conjoined to, the front corner of pronotum and bears a large setigerous puncture; mesosternum transverse rectangular between the middle-coxæ, with hind margin almost straight and very narrowly produced posteriorly in the middle; metasternum strongly transverse, with a distinct central longitudinal suture and distinctly convex on each side of the suture. Legs moderately robust, with intermediate pair more slender; femora incrassate medially, constricted near the apex, generally minutely toothed beneath; tibiæ slender, gently thickened terminally, with some longitudinal ridges, unarmed the spur, deeply notched on the outer side at the apex in two hindpairs; tarsi rather wide, with two basal segments subtrigonate, 3rd one deeply bilobed, claw-segment clubate and somewhat curved; claws appendiculate.

Secondary sexual characters obscure, in the male of some species the body narrower, the antennæ longer and the apical area of fore-tibiæ distinctly thicker than those corresponding characters of the female, and the apical margin of last abdominal sternite straight in male but gently rounded in female.

Key to the species

1. Elytra not metallic in coloration, distinctly costate on each side. *costatus* sp. nov.

1'. Elytra bears a metallic shimmer, not costate on each side..... (2)

2. Pronotum and elytra concolorous, æneous with a cupreous shimmer, sometimes bluish black or simple black with a very slight metallic sheen ..... *tibialis* (Lefèvre).

2'. Prontum red or red-brown, elytra cupreo-æneous. *tibialis* (Lefèvre) var. *æneipennis* Chen.

46. CLEOPORUS COSTATUS sp. nov.

Body oblong. General color piceous to back, sometimes light to dark castaneous, somewhat lustrous; antennæ (the five terminal segments always darker than the basal ones), clypeus, labrum, palpi and legs yellowish brown to reddish brown.

Head: vertex and frons distinctly convex, faintly punctulate, longitudinally sulcate or shallowly foveolated on the middle of frons, deeply and broadly sulcated above the eyes; clypeus subquadrate, distinctly delimited from frons by a W-shaped impression, sharply ridged and arched inwardly on each side, emarginated at the front margin, gently transversely concave and sparsely punctulate on the surface. Antennæ filiform, about half or rather more than half as long as body, with 1st segment distinctly thickened and somewhat curved, 2nd nearly truncate-conical and shortest, 3rd to 5th slender and nearly equal in size to each other, 6th also slender and slightly longer than the 2nd but shorter than the 5th, the four followings triangularly dilated respectively and gradually diminishing their length terminally or subequal to each other, 11th nearly spindle-shaped and nearly equal in thickness to, but longer than, the 7th. Pronotum transverse, about one and a half times as wide as it is long, rather narrowed in front; lateral margins sharply edged and gently rounded, basal margin distinctly bordered with median area somewhat arched posteriorly and the border widened at this area; dorsum strongly transversely convex, rather strongly or faintly punctate, the punctures generally finer or obsolete or disappeared on each side. Scutellum subpentagonal, rather longer than wide, slightly narrowed posteriorly, finely punctulate and shagreened on the basal half of the surface. Elytra elongate, wider at the base than of pronotum, gently narrowed posteriorly with a slight curvature, narrowly rounded at the apex; dorsum strongly convex, with a shallow transverse impression on a little behind the base, regularly punctate in eleven longitudinal rows (including a short scutellar and an external marginal row) of punctures on each elytron, the punctures become finer posteriorly and especially larger within the post-basal transverse impression, interstices of these regular rows of punctures mostly nearly flat or slightly convex and nearly impunctate or very finely but sparsely punctulate under a high power lens, but one of the posthumeral interstice more or less distinctly costate. Underside: prosternum subquadrate between the fore-coxæ, longer than wide, strongly widened behind the coxæ, nearly straight at the hind margin, somewhat convex and coarsely pubescent-punctate on the middle of surface, very thickly rugulose and shagreened on the marginal area; pro-episterna large, finely shagreened, often coarsely punctate, with front margin nearly straight at the most part

and latero-anterior area somewhat converging towards the anterior border of pronotum; mesosternum nearly quadrate between the middle-coxæ, finely but sparsely pubescent-punctulate on the surface; metasternum finely but very sparsely pubescent-punctulate; abdomen finely and rather sparsely pubescent-punctulate; femora armed with a fine denticle beyond the middle of underside, two posterior pairs of tibiæ deeply emarginated on the outer side at the apex, claws bifidate.

Male.—Antennæ rather longer than half the length of body, posthumeral costa on each elytron ended much before the middle, last abdominal sternite with apical margin straight, body narrower than female.

Female.—Antennæ about half as long as body, post-humeral costa on each elytron much stronger than of the male and extended much beyond the middle, last abdominal sternite emarginated at the apical margin.

Length.—♂, 2.25 to 2.75 mm; ♀, 2.75 to 3.25 mm.

Local distribution.—Kôsyun, Kôsyun-Gun, Takao-Syû (4 ♀ ♀, Paratype, April 25 to May 25, 1918, J. Sonan leg.); Taitô, Taitô-Tyô (1 ♂, Paratype, February 25 to March 27, 1919, S. Inamura leg.); Kusukusu, Kôsyun-Gun, Takao-Syû (2 ♂ ♂ and 6 ♀ ♀, Paratype, April 20, 1928, J. Sonan leg.; 1 ♂, Paratype, June 17, 1937, M. Chûjô leg.; 1 ♀, Paratype, June 18, 1937, M. Chûjô leg.); Kuaru, Kôsyun-Gun, Takao-Syû (1 ♀, Paratype, August 21 to 25, 1932, Y. Miwa leg.; 1 ♀, Paratype, May 15, 1933, Y. Miwa leg.; 4 ♂ ♂ and 2 ♀ ♀, June 12, 1937 and 7 ♂ ♂ and 4 ♀ ♀, June 15, 1937, incl. Holo-, Allo-, and Paratype, M. Chûjô leg.).

General distribution.—Formosa.

This new species is very easily distinguished from all its allies by the presence of a distinct lateral costa on each elytron.

47. CLEOPORUS TIBIALIS (Lefèvre).

Stethotes tibialis LEFÈVRE, Ann. Soc. Ent. France Bull. (6) 5 (1885) 65–66 (Tonkin).

Mouhotina tibialis LEFÈVRE, Ann. Soc. Ent. France (6) 9 (1889) 293 (Cochin-China: Saigon; Annam: Qui-Nhon; Cambodia: Pnomh-Penh); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 148 (Tonkin, Cochin-China, and Cambodja).

Cleoporus tibialis CHEN, Sinensia, Acad. Sinica 3 6 (1935) 285–286 (China: Shanghai in Kiangsu, Hangchow in Chekiang, Chusen, Kiangsi, Pin-Fa in Kweichow, Hoa-Binh in Tonkin).

Stethotes pallidipes FAIRMAIRE, Ann. Soc. Ent. Belgique 32 (1888) 36–37 (China: Kiangsi); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 148 (China: Kiangsi; Annam, Tonkin, and Cochin-China).

Mouhotina rufipes LEFÈVRE, Ann. Soc. Ent. France (6) 9 (1889) 293 (Chochin-China: Saigon).
Tricliona fulvipes CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 34 (Formosa: Kosempo).

Body oblong or oblong-ovate. The coloration variable and the following form is most common in the Formosan examples: Head, antennæ, pro-episterna and legs deep yellowish brown to reddish brown, with terminal segments of antennæ and tarsi usually more or less infuscated, palpi and basal segments of antennæ always paler, sometimes the upper area of head, coxæ and femora more or less infuscated and in these cases they are bear a faint æneous or cupreous shimmer; pronotum, scutellum and elytra æneous, with distinct cupreous sheen; underside piceous to pitchy black, with a slight cupreous shimmer. In some specimens the general color of dorsum deep black or blue-black with only a very slight metallic lustre, underside pitchy black to deep black; head, antennæ and legs dark reddish brown, with palpi and basal segments of antennæ lighter, terminal segments of antennæ and femora darker, coxæ and trochanters concolorous with the underside. In the foreign examples there may be seen the more greenish ones.

Head: vertex and frons distinctly convex, very finely but not thickly punctulate, but in some of the foreign specimens the punctures coarser with their interspaces somewhat wrinkled or reticulated, shortly longitudinally sulcate on the middle of frons, deeply and broadly sulcate above the eyes; clypeus transverse subquadrate, distinctly delimited from frons by a curved transverse impression which is straight at the middle in some cases, sharply edged and slightly excurved on each side, emarginated at the middle of front margin, flat (with anterior marginal area more or less depressed) or nearly entirely hollowed on the surface, very finely but sparsely punctulate, sometimes rugulose. Antennæ filiform, about half or rather more than half as long as body, with 1st segment strongly thickened and somewhat curved, 2nd shortest, nearly oblong and gently curved, 3rd most slender but much longer than the 2nd, 4th slightly wider but shorter than the 3rd and much narrower but longer than the 2nd, 5th rather wider than, but nearly equal in lenght to, the 4th, 6th much wider and thicker than the 5th but much slenderer than the 7th, 7th and the three following distinctly dilated and nearly equal in size to each other, 11th nearly spindle-shaped and nearly equal in thickness to, but much longer

than, the 10th. Pronotum transverse, rather less than twice as wide as it is long, somewhat narrowed anteriorly; lateral margins sharply ridged and nearly straight with the anterior and basal ends somewhat convergent, basal margin distinctly bordered and markedly produced posteriorly at the median area; dorsum strongly transversely convex, rather thickly punctate with their interspaces extremely minutely punctulate under a high power lens, these punctuations thicker or sparser and stronger or weaker by the individuals, and usually obsolete or disappeared on the lateral areas. Scutellum longer than wide, gently narrowed from the base to a little before the apex and then strongly convergent in a point, slightly longitudinally convex on the surface, nearly impuntate or extremely minutely but not very thickly punctulate on the basal area. Elytra elongate, distinctly wider than pronotum, gently rounded on each side, narrowly rounded at the apex, dorsum strongly convex, slightly transversely depressed on a little behind each humerus, regularly punctate in the longitudinal rows (including a short scutellar and an external marginal one) on each elytron, the punctures become finer posteriorly and also on the medio-basal area, the 8th and 9th rows branched in two rows respectively at a little behind the humerus, and besides these there is a short row between the basal parts of 9th and 10th rows, interstices of these regular rows of punctures finely but distinctly punctulate in the common examples, but in the dark colored examples and also in the foreign examples the punctures much finer and more sparsely settled or almost impunctate. Underside: prosternum transverse-subquadrate between the fore-coxæ, strongly widened posteriorly behind the coxæ, gently and slightly sinuate at the hind margin, finely shagreened and coarsely pubescent-punctate on the surface, with median area somewhat raised and not shagreened; pro-episterna large, developed dorsally across the front corner of pronotum, coarsely pubescent-punctate, with front margin gently bisinuate; mesosternum transverse-rectangular between the middle-coxæ, sharply ridged and gently excurved on each side, slightly emarginated on each side of the middle at the hind margin, sparsely pubescent-punctulate on the surface, sometimes rugose or strigose; metasternum finely but very sparsely pubescent-punctulate; abdomen rather thickly pubescent-punctulate; femora unidenticulate on the underside beyond the middle, two posterior pairs of tibiæ deeply notched on the outer side at the apex, claws bifidate.

Male.—Last abdominal sternite with apical margin narrowly straight, apices of fore-tibiæ markedly dilate.

Female.—Last abdominal sternite with apical margin widely and slightly emarginated, apices of fore-tibiæ simple.

Length.—♂, 2.50 to 3.25 mm; ♀, 3.00 to 3.25 mm.

Local distribution.—Is. Kizan-to, Taihoku-Syû (1♂, July 5, 1932, K. Kobayashi, leg.); Taihoku-Si, Taihoku-Syû (3♂♂ and 5♀♀, June 20, 1936, M. Chûjô leg.).

Kosempo (after M. Chûjô, 1938).

General distribution.—Indo-China, China, and Formosa.

47a. CLEOPORUS TIBIALIS (Lefèvre) var. ÆNEIPENNIS Chen.

Cleoporus tibialis Lefèvre var. *æneipennis* CHEN, Sinensia 3 6 (1935) 285–287 (Tonkin: Luc Nam).

Mouhotina rufipes var. LEFÈVRE, Ann. Soc. Ent. France (6) 9 (1889) 293 (Cochin-China: Saigon; Annam: Qui-Nhon).

This variety differs from the original form by having the coloration as follows:

General color red or red-brown, with palpi, basal segments of antennæ and legs paler; mandibles dark reddish brown, with apices piceous to black; tarsi and terminal segments of antennæ partly stained with piceous; scutellum pitchy red, with median area lighter; elytra æneous, with cupreous sheen; abdomen often piceous to pitchy black.

Length.—♂, 3.0 mm; ♀, 3.25 mm.

Local distribution.—Taihoku-Si, Taihoku-Syû (1♂ and 1♀, April 20, 1936, M. Chûjô leg.).

General distribution.—Tonkin and Formosa.

This variety was captured by myself in the northern part of Formosa together with several examples of the original form and it is a new record from Formosa.

Tribe XI. ENDOCEPHALINI

Endocephalites CHAPUIS in Lacordiare, Hist. Nat. Ins.: Gen. Ins. 11 (1874) 343.

Endocephalitæ LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 154.

Endocephalini JACOBY, Fauna Brit. India, Incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 510.

Colaspoidini CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 486–487, 488, 491–492 (pars).

General characters.—Body oblong, ovate or subquadrate-ovate in outline; dorsum Convex and glabrous; underside, together with antennæ and legs, more or less pubescent. Head more or less immersed in prothorax, not grooved around the eyes. An-

tennæ filiform or with widened terminal segments. Pronotum strongly transverse, with distinct lateral margins. Elytra elongate, about as wide as, or wider than, pronotum at the base. Pro- and mesosternum broad between the coxæ. Pro-episterna with front margin sinuate or arched forwardly.

The present group contains thirteen genera, but only the following genus have a relation to our fauna.

Genus xx. COLASPOIDES Laporte

Colaspoides LAPORTE in Silbermann, Rev. d'Ent. 1 (1833) 22; BALY, Ent. Monthl. 1 (1864) 134; Trans. Ent. Soc. London 2 4 (1867) 134–135; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 11 (1874) 346; JACOBY, Biol. Centr.-Americana, Col. 1 6 (1882) 185; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 157; HORN, Trans. American Ent. Soc. 19 (1892) 196, 228–229; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 511, 514; CHEN, Sinensia, Acad. Sinica 3 6 (1935) 232, 249–251; l. c. 5–6 11 (1940) 492.

Amasia CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 313.

Genotype: *Colaspoides limbata* (Fabricius), Spec. Inc. App. 2 (1781) 498 (*Cryptocephalus*) from Cayenne [Fixed by J. S. Baly, Ent. Monthl. Mag. 1 (1864) 134].

Range: Tropicopolitan.

General characters.—Body oblong ovate or subquadrate-ovate in outline; dorsum convex and glabrous; underside, together with antennæ and legs, more or less pubescent.

Head deeply engaged in prothorax, generally invisible or hardly visible from above, nearly perpendicularly placed to the longitudinal axis of body, not grooved above the eyes; vertex and frons commonly more or less convex, often with a central longitudinal groove, sometimes slightly tuberculate in the middle above the clypeus; supra-antennal areas more or less convex respectively, impunctate and smooth; clypeus scarcely distinctly separated or not delimited from frons, distinctly widened anteriorly, with front margin more or less emarginated at the middle. Mouth-parts: labrum subquadrate, more or less wider than long, parallel-sided, rounded and sparsely pubescent at the front corners, straight or somewhat emarginated at the middle of front margin, flat on the surface, with anterior area depressed or emarginate-depressed, frequently with a transverse row of only a few pubescent-punctures on the anterior edge of the flat area: mandibles robust, strongly angularly curved inwardly, acuminated at the apex, hollowed at the inner face with a large tooth or angulation on the lower side behind the

apex; maxillary palpi strongly elongate, with 1st segment very narrowly cylindrical and much shorter than any one of the three succeedings, 2nd clubate, 3rd truncate-conical and rather thicker but shorter than the 2nd, 4th strongly thickened, thickest at a little beyond the base, thinned terminally, truncated at the apical extremity and much longer than the 3rd; labial palpi also long, with 1st segment very much smaller than any one of the two followings, 2nd very slender but somewhat thickened at the apical area, 3rd nearly ovate with apical area strongly thinned and truncated at the apical extremity. Eyes rather large, ovate or shortly oblong, with each inner margin slightly emarginated. Antennæ filiform, very slender, generally only a little shorter than the body, with 1st segment strongly thickened and somewhat curved, 2nd nearly truncate-conical, terminal segments very slightly thickened in general, but rarely rather visibly thickened. Pronotum strongly transverse, almost as wide at the base as elytra, narrowed in front with a distinct curvature on each side; front margin narrowly bordered (the border somewhat widened on each side and bears a large setigerous puncture near the lateral end) and nearly straight or somewhat arched forwardly but excurved on each side, front corners nearly rectangular, lateral margins distinctly edged and somewhat explanate laterally, basal corners rather larger than 90° in angulation, basal margin distinctly bordered (the border somewhat widened on each side and bears a large setigerous puncture near the lateral end) and slightly sinuate on each side of the median area which is a little arched posteriorly; dorsum transversely convex, with a transverse punctured-groove touched to the basal border. Scutellum nearly obtrigonate or subquadrate (with posterior margin rounded) or subpentagonal (with posterior angles rounded), flat on the surface. Elytra elongate, slightly or rather more wider at the base than pronotum, rounded at the apex, convex on the dorsum, more or less regularly punctured, the punctures generally arranged in regular or irregular longitudinal rows, with humeri separately elevated and free from the punctures; elytral epipleura oblique, smooth, narrowed posteriorly and evanished about the latero-apical corner of elytron. Underside: prosternum generally very wide, slightly arched inwardly along the fore-coxæ, strongly widened posteriorly behind the coxæ, straight at the hind margin, flat on the surface; pro-episterna subtrigonate, with front margin gently sinuate or more or less

feebly arched forwardly, especially near the antero-internal angle; mesosternum transverse, distinctly bordered and slightly arched inwardly on each side along the middle-coxæ, obliquely truncated at the latero-posterior corner, more or less prominent posteriorly at the middle of hind margin, nearly flat on the surface; metasternum strongly transverse, somewhat convex on each side, with a distinct central longitudinal suture and a tubercle on each side and touched to near the anterior end of the suture. Legs fairly long; femora medially incrassate, not constricted near the apex, either with a denticle or a slight triangular angulation on each underside, but frequently without such a denticle or angulation tibiæ slender, simple, gently thickened towards the apex where the external angles are generally rounded and scarcely produced, shallowly grooved or flat on each dorsal or outer side, unarmed the spur; tarsi with 1st segment strongly elongate and sometimes equal in length to, or rather longer than, the two followings united together, 2nd trigonate, 3rd deeply bilobed, claw-segment clubate and somewhat curved; claws strongly appendiculate.

The secondary sexual characters are highly developed, viz., the male almost always having the 1st tarsal segment of the two anterior pairs of legs strongly dilated, sometimes the posterior femora provided with strong spines or long hairs, and rarely the antennæ clothed with many very long hairs on the undersides of 3rd to 7th segments; besides these other sexual modifications may also occur, viz., the characters of last abdominal sternite and pygidium generally distinctly differently structured between the two sexes.

Key to the species

1. Body smaller, 3.25 to 3.75 mm in length and 1.75 to 2.25 mm in width; three to five terminal segments of antennæ infuscated. *persicariæ* sp. nov.

1′. Body larger, longer than 4.75 mm and wider than 3.5 mm ..... (2)

2. Male with hind-tibiæ not especially thickened at the apical area and rather angularly produced posteriorly at the apex of lower side, seven or eight terminal segments of antennæ strongly infuscated; female unknown ..... *taiwana* sp. nov.

2′. Male with hind-tibiæ suddenly strongly thickened at the apical area and unispinose at the apex of lower side, antennæ with only one to three terminal segments infuscated ..... *sauteri* sp. nov.

18. COLASPOIDES PERSICARIÆ sp. nov.

Body elongate-oblong. Head and dorsal surface of body bright metallic green or greenish cupreo-æneous, underside black, mouthparts yellowish brown with mandibles usually deeper or darker than the others, antennæ and legs yellowish brown, with three to five terminal segments of antennæ more or less infuscated.

Head: vertex and frons somewhat convex, strongly and rather sparsely pubescent-punctate, weakly strigose or rugose on each side, with a central longitudinal furrow supra-antennal areas somewhat raised in subtriangular or subquadrangular, impunctate and smooth; clypeus subtriangular, strongly widened anteriorly, not distinctly separated from frons at the upper end, somewhat emarginated at the middle of front margin and distinctly angulated on each side of the former emargination, variously pubescent-punctate on the surface. Antennæ filiform, much longer than half but rather shorter than the whole length of the body, with 1st segment strongly thickened and somewhat curved, 2nd nearly truncate-conical and shortest, the nine succeedings narrowed elongate and the rough order of their length as follows: $5 \fallingdotseq 6 \fallingdotseq 7 > 8 > 9 > 10 > 11 > 4 > 3$, 9th to 10th somewhat thickened and gently curved, 11th with a conical appendix at the apex. Pronotum strongly transverse, much more than twice as wide as it is long, rather wider at the anterior extremity than the basal end; lateral margins sharply ridged, rather strongly rounded and distinctly explanate horizontally, basal margin distinctly bordered and lightly arched posteriorly at the median area; dorsum transverse convex, strongly and rather thickly punctate, interspaces of these punctures very finely but not thickly punctulate, with a narrow groove closely along the basal border. Scutellum nearly obtrigonate, with posterior portion more or less rounded on each side, finely but sparsely punctulate or impunctate on the surface. Elytra strongly elongate, nearly parallel-sided, slightly wider than pronotum, with apex narrowly rounded; dorsum strongly convex, strongly and thickly punctate, the punctures stronger on each side, smaller on the basal and apical areas and partly arranged in longitudinal rows. Underside: prosternum nearly trapezoidal between the fore-coxæ, distinctly widened posteriorly, very slightly emarginated at the hind margin, more or less rugosely or strigosely pubescent-punctate; pro-episterna with outer half of the front margin straight and the inner half gently arched

forwardly; mesosternum transverse rectangular between the middle-coxæ, with median area of the posterior marginal area prominent posteriorly, surface longitudinally convex and coarsely pubescent-punctate; metasternum strongly transverse, finely but not thickly pubescent-punctulate, the punctures finer and more sparsely settled on the median area, rather obtusely and obliquely strigose or wrinkled on each side, finely shagreened on the lateral extremities, impunctate on the posterior marginal area, with a pair of small tubercle near the anterior end of the medio-anterior area; meta-episterna finely shagreened, sparsely pubescent-punctate in one or more obtuse transverse rows on each side, but thickly and more strongly pubescent-punctate on the median area; pygidium more or less narrowed posteriorly, widely or narrowly rounded at the apex, with surface distinctly bended in two, basal and apical, parts, finely shagreened, coarsely pubescent-punctate, the basal area deeply and broadly grooved on the middle from just beyond the basal margin to the middle of the base of apical part including a short longitudinal ridge in it, the shape and structure of the apical part different by the sexes; fore-femora strongly angulated at the middle of each lower side.

Male.—Antennæ furnished with many long setæ on the lower side of the 4th to 7th segments; prosternum with front margin developed in a distinct lobe directing downwardly at the middle; last abdominal sternite very deeply and widely emarginated at the apical margin; pygidium nearly semicircular, with apical half nearly semicircularly bended, finely but sparsely pubescent-punctate, deeply and subtriangularly foveolated on the middle touched to the median part of the base where the present apical half area broken and much distanted from the apex, gently depressed on each side of the fovea; 1st tarsal segment of the two anterior pairs of legs somewhat dilated and distinctly wider than those corresponding segment of the female.

Female.—Last abdominal sternite subtriangularly notched at the apical margin; pygidium subtrigonate, with apical half subtriangularly bended, rugosely pubescent-punctate, with a long central longitudinal groove which is touched to the base where the present are broken closely approached to the apical margin, distinctly depressed on each side of the groove.

Length.—♂, 3.25 to 3.75 mm; ♀, 3.5 to 4.0 mm.

Food-plant.—*Persicaria chinensis* (Linn.) Nakai (Japanese name: *Taiwan-turusoba*).

Local distribution.—Mt. Sô-zan (altitude about 400 meters), Sitisei-Gun, Taihoku-Syû (7♂♂ and 6♀♀, **Paratype**, April 29, 1932, M. Chûjô leg.; 1♂, **Paratype**, May 24, 1936, M. Chûjô leg.; 1♂ and 2♀♀ **Paratype**, April 18, 1937, M. Chûjô leg.).

General distribution.—Formosa.

The present new species is very easily distinguished from the other known species of this genus by its small body and the close structural characters.

49. COLASPOIDES TAIWANA sp. nov.

Body elongate-oblong. Head and dorsal surface of body bright metallic green, underside shiny piceous to black; mouth-parts and lower area of clypeus yellowish brown, with apices of mandibles piceous to black; antennæ dark yellowish brown to blackish brown, with two basal segments pale yellowish brown and the one or two followings slightly infuscated; underside of prothorax with a metallic green lustre on each side in some cases; metasternum almost always with a metallic green shimmer on each side and in many cases the medio-posterior border yellowish brown, 1st abdominal sternite, with medio-anterior border frequently yellowish brown; last abdominal sternite, together with the posterior margin of the preceding sternite, light to dark yellowish brown; legs yellowish brown, with hind-femora more or less infuscated.

Head: vertex and frons somewhat convex, rather thickly pubescent-punctate, the punctures become larger downwardly, somewhat strigose or rugose above the eyes, with a short longitudinal impression on the middle of the anterior area of frons; supra-antennal areas somewhat raised respectively, impunctate and smooth; clypeus subtrigonate, not separated from frons at the upper end, strongly widened anteriorly, front margin emarginated at the middle and strongly angulated on each side of the emargination, rather sparsely pubescent-punctate on the surface. Antennæ slender, filiform, a little shorter than the whole length of body, with 1st segment strongly thickened and somewhat curved, 2nd nearly truncate-conical and very much shorter than any one of the other, 3rd and 4th most slender and nearly equal in length to each other, 5th to 7th strongly elongate, nearly equal in size to one another and each one of them slightly thicker than the 3rd or 4th, the four followings nearly equal in length to each other and each one of them nearly equi-length to, but much thicker than, the 3rd or 4th, with apical

portion of 11th triangularly pointed. Pronotum transverse, rather narrower than twice as wide as it is long, only a little narrowed in front; lateral margins distinctly rounded, sharply ridged and weakly explanate horizontally, basal margin distinctly bordered, with median area lightly arched posteriorly; dorsum transversely convex, strongly and rather thickly punctate, the punctures variable in size, with a deep groove closely along the basal border. Scutellum longer than wide, very slightly narrowed from the base to a little beyond the middle and then strongly convergent at the apical end, lightly emarginated at the basal margin, impunctate on the surface, sometimes with a few fine punctures and shagreen structure on the middle. Elytra elongate, somewhat wider than pronotum, nearly parallel-sided at the basal two-thirds and then strongly convergent apically with a gentle curvature; dorsum strongly convex, strongly and thickly punctate, the punctures partly arranged in longitudinal rows, the punctuation especially very strong on the lateral areas where their interspaces are somewhat wrinkled. Underside: prosternum nearly trapezoidal between the fore-coxæ, distinctly widened posteriorly, with hind margin nearly straight, surface coarsely pubescent-punctate and finely rugose on the posterior area: pro-episterna with front margin slightly arched outwardly in two parts; mesosternum transverse-subquadrate between the middle-coxæ, with medio-posterior area prominent posteriorly, surface longitudinally convex and coarsely pubescent-punctate; metasternum strongly transverse, distinctly convex on each side of the middle, rather sparsely pubescen-punctate, with medio-posterior area impunctate, lateral area somewhat strigose, lateral borders finely shagreened and a pair of small tubercle on the middle of the anterior marginal area; meta-episterna finely shagreened, sparsely pubescent-punctate along the lateral borders; abdomen rather sparsely pubescent-punctate, the punctures finer and more sparsely settled on the middle than on each side, finely shagreened and rugose on the lateral areas together with the medio-anterior area of the 1st sternite; pygidium distinctly narrowed posteriorly, the surface strongly curving in two (basal and apical) parts, finely shagreened, coarsely pubescent-punctate, deeply and broadly grooved on the middle from just beyond the basal border to a little before the apex, with a short longitudinal costa in the middle of the groove which belongs to the basal part of the surface, more or

less depressed between the central groove and latero-marginal areas; fore-femora distinctly angulated on the middle of each lower side.

Male.—Metasternum and abdomen distinctly hollowed on the middle; last abdominal sternite strongly emarginated in ⌒-shape at the posterior margin, with a distinct fovea on the middle touched to the apical margin; pygidium with apical part forming a shape falls into the apical emargination of the last abdominal sternite; 1st tarsal segment of the two anterior pairs of legs strongly dilated but much longer than wide and each one of them more (the middle-pair) or less the anterior-pair) narrowed in front; hind-tibiæ distinctly angulated and furnished with a few long setæ at the apical end of lower side.

Female unknown.

Length.—♂, 4.75 to 5.00 mm.

Local distribution.—Mt. Rara-san (altitude about 1,600 meters), Bunzan-Gun, Taihoku-Syû (1♂, **Paratype**, May 26, 1934, M. Chûjô leg.); Tyakon (altitude about 800 meters), Bunzan-Gun, Taihoku-Syû (1♂, **Paratype**, May 5, 1940, M. Chûjô leg.); Rimogan (altitude about 600 meters), Bunzan-Gun, Taihoku-Syû (1♂, **Holotype**, April 5, 1940, M. Chûjô leg.).

General distribution.—Formosa.

This new species is most nearly related to *Colaspoides tarsalis* Chen from Kiangsi in China, but may be distinguished from it by the body smaller, the pronotum not more than twice as wide as it is long, the elytra parallel-sided at the basal two-thirds and the 1st segment of the intermediate-tarsi of male not much narrower than the corresponding one of the fore-tarsi.

50. COLASPOIDES SAUTERI sp. nov.

Chrysolampra fulva [nec Chûjô (1935)] CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 25 (Formosa: Sokutsu in Bansho-ryo-Distr.).

Chrysolampra subænea [nec Baly (1908)] CHÛJÔ, Arb. Morph. Taxon. Ent. Berlin-Dahlem 1 5 (1938) 25 (Formosa: Sokutsu in Bansho-ryo-Distr.).

Body oblong. In the limit of my present examples the general colors of the two sexes are distinctly different and, therefore, they will be described in the paragraph of the following sexual differences.

Head: vertex and frons gently convex, more or less depressed tudinal furrow which is not strong and often disappeared, sparsely pubescent-punctate on the lateral and anterior areas, on the middle of the anterior area of frons with a central longi-

the punctures on the anterior area always strong, but the others weak or obtuse, strigose or rugose on each side above the eyes; supra-antennal areas lightly raised, distinctly distanted from each other, impunctate and smooth; clypeus subtrigonate, distinctly widened anteriorly, not delimited from frons at the upper end, gently emarginated at the middle of the front margin and lightly angulated on each side of the emargination, sparsely pubescent-punctate on the surface, the punctures on the anterior area very much finer than those on the posterior area and some of them entering between the larger punctures on the posterior area. Antennæ slender, filiform, somewhat shorter than the body-length, with 1st segment strongly thickened and somewhat curved, 2nd nearly truncate-conical and very much shorter than any one of the others, 3rd and 4th most slender and nearly equi-length to each other or the 4th slightly longer than the 3rd, the seven succeeding rather thicker than the 3rd or 4th, especially the 11th distinctly thicker with a triangular appendix at the apex, and the rough order of the length of these segments are as follows: $5 \fallingdotseq 6 > 7 > 8 > 11 > 9 > 10 > 4 \fallingdotseq 3 \fallingdotseq 1 > 2$. Pronotum transverse, much more than twice as wide as it is long, slightly narrower at the anterior extremity than the base; lateral margins sharply ridged and narrowly explanated laterally, basal margin distinctly bordered and gently arched posteriorly at the median portion; dorsum transversely convex, strongly and rather thickly punctate, with a distinct groove touched to the basal and lateral margins. Scutellum nearly trapezoidal, with latero-posterior angles more or less rounded, very finely but sparsely punctulate on the surface. Elytra elongate subquadrate, somewhat wider than pronotum, nearly parallel-sided or slightly narrowed posteriorly, rounded at the apical portion; dorsum convex, strongly and thickly punctate, the punctures mostly arranged in longitudinal rows but not formed the striæ, somewhat wrinkled on each side behind the humerus. Underside: prosternum nearly trapezoidal between the fore-coxæ, gently constricted on each side, distinctly widened posteriorly, very slightly arched inwardly at the hind margin, rather rugose and coarsely pubescent-punctate on the surface; pro-episterna with front margin gently bisinuate; mesosternum transverse rectangular, with hind margin strongly produced posteriorly at the middle, rather rugosely and coarsely pubescent-punctate on the surface; metasternum finely but not thickly pubescent-punctulate, with median and

posterior areas impunctate and smooth, finely shagreened on the latero-marginal areas together with the meta-episterna which are sparsely pubescent-punctate on each outer area: abdomen finely shagreened, rather finely but not very thickly pubescent-punctate, 1st sternite with a pair of tubercle on the medio-anterior area; pygidium narrowed posteriorly, strongly bending in two (basal and apical) parts, finely shagreened, rather strongly pubescent-punctate with a deep and wide longitudinal groove on the middle of the basal part, the groove not reached to the basal margin but completely hollowed the middle of the apical margin (which is the boundary of the two parts and distinctly ridged on each side of the apical end of the above mentioned groove) and including a weak and short longitudinal ridge in the middle, the structure of the apical part differs by the sexes; fore-femora strongly dilated and triangularly toothed on the middle of each underside.

Male.—General color yellowish brown; mandibles, sometimes together with labrum, reddish brown, with apices black; antennæ with one or two terminal segments frequently slightly infuscated, 4th to 8th segments furnished with many long setæ on each underside; prosternum not wider than long; last abdominal sternite strongly emarginated in ⌒-shape at the apical margin and markedly depressed on the middle of surface along the apical margin; apical part of pygidium nearly semicircular, longitudinally hollowed on the middle of basal half, the hollow shallowed posteriorly; 1st tarsal segment of the two anterior pairs of legs strongly expanded but much longer than wide and distinctly narrowed anteriorly; tibiæ, especially of the hind-pair, much more thickened at the apical area than in female; hind-tibiæ armed with a distinct blunt-headed spine or tooth and some long setæ at the apex of each lower side.

Female.—Body wider than in male, the wideness remarkably appeared on the inter-ocular area, pronotum, inter-coxal areas of prosternum (which is much wider than long) and mesosternum, etc.; head much more strongly and thickly punctured than in male; last abdominal sternite lightly emarginated at the apical margin and not depressed on the middle of surface; apical part of pygidium nearly transverse-oblong, not much wider than long, distinctly excavated on the whole surface. General color reddish brown, but head and dorsal surface more or less tinged with bright æneous, frequently the ground color completely vanished and generally the pronotum most

strongly tinged with these dark coloration, on the contrary the head most weakly tinged and frequently nearly completely free from the influence of these metallic coloration; mouth-parts and anterior areas of clypeus light to dark reddish brown, with apices of mandibles black and the bases of them always deeper or darker than the others; reddish brown color of the head with a strong tendency to develop and in the case that the head nearly or entirely reddish brown the scutellum also reddish brown; underside reddish brown, frequently partly or nearly entirely infuscated; antennæ and legs nearly concolorous with those of male.

Length.—♂, 4.25 to 5.25 mm; ♀, 5.0 to 5.5 mm.

Local distribution.—Rokki, Kizan-Gun, Takao-Syû (1 ♂, **Paratype**, May 2, 1908, I. Nitobe leg.); Rônô, Heitô-Gun, Takako-Syû (1 ♂, **Paratype**, May 3, 1908, I. Nitobe leg.); Hori, Nôkô-Gun, Taityû-Syû (1 ♀, **Paratype**, May 22, 1908, I. Nitobe leg.); Sokutu, Bansyoryô-Distr., Takao-Syû (♂, **Paratype**, May 7, 1911, H. Sauter leg.); Kôsyun, Kôsyun-Gun, Takao-Syû (1 ♂ and 6 ♀ ♀, **Paratype**, April 25 to May 25, 1918, J. Sonan leg.); Mt. Sô-zan (altitude about 400 meters), Sitisei-Gun, Taihoku-Syû (2 ♀ ♀, **Paratype**, June 5, 1932, M. Chûjô leg.; 1 ♀, **Paratype**, May 24, 1936, M. Chûjô leg.); 1 ♂ and 3 ♀ ♀, **Holo-, Allo-,** and **Paratype**, May 29, 1938, M. Chûjô leg.); Tonroku (altitude about 500 meters), Bunzan-Gun, Taihoku-Syû (1 ♀, **Paratype**, May 25, 1934, M. Chûjô leg.).

General distribution.—Formosa.

Colaspoides fulva (Chûjô) from Loo-Choo is closely allied to the present species, but the male specimen from Loo-Choo having the antennæ not furnished with a group of long setæ on the underside of 4th to 8th segments, the pygidium not transversely ridged between the basal and apical parts, the 1st tarsal segment of the two anterior pairs of legs rather widened anteriorly (in the fore-pair) or nearly parallel-sided (in the middle-pair), the tibiæ not much thicker than those of female and the hind-pair unarmed the spine or tooth and long setæ.

Colaspoides pilicornis Chen from Tonkin and S. China (Kiang-si) also very nearly related to this new species, but the male of Chinese species having the body larger (5.3 to 6.0 mm in length), the frons somewhat tubercular in the middle above the clypeus, the pronotum with lateral margins almost straight and the surface finely but sparsely punctate, and the pro-episterna with front margin almost straight.

Tribe XII. CORYNODINI

Corynodina MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 24.
Corynodites CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 336.
Corynoditae LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 145.
Corynodini JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 284, 491–492.
Colaspoidini CHEN, Sinensia, Acad. Sinica 5–6 11 (1940) 486–488, 491–492 (pars).

General characters.—Body oblong-oval or oblong, often more or less elongate, glabrous on the dorsum, more or less pubescent on the underside together with antennæ and legs. Head deeply inserted in prothorax generally up to the hind margin of eyes, with deep and posteriorly widened sulcus on each side behind the eye. Antennæ robust, subfiliform or claviform, with terminal segments more or less widened. Pronotum nearly truncate-conical viewed dorsally or globose, with distinct lateral margins. Elytra subcylindrically elongate, wider than pronotum, without rugosities on each side. Pro-episterna with front margin arched forwardly. Legs robust, fairly long; femora fusiform, unarmed beneath; tibiæ longitudinally sulcate and ridged, not emarginate at apex but strongly angularly expanded, unarmed the spur; tarsi broad; claws appendiculate or bifidate.

This group contains four genera, but only *Corynodes* Hope, is related to our faunistic region at present and may be distinguished from the three others by the head with supra-ocular excavations very broad and deep, and the antennæ with terminal segment strongly dilated and flattened.

Genus xvi. CORYNODES Hope

Corynodes Hope, Col. Man. 3 (1840) 162; MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 30; GERSTAECKER, Peters' Reise nach Mosambique 5 (1862) 335; BALY, Trans. Ent. Soc. London 2 4 (1867) 99; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 337; LEFÈVRE, Mém. Soc. Roy. Sci. Liége (2) 11 (1885) 146; JACOBY, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 492; CHEN, Sinensia, Acad. Sinica 5–6 5 (1934) 484–487; l. c. 3 6 (1935) 233, 265; 5–6 11 (1940) 492.

Eudora LAPORTE, Hist. Nat. Ins., Col. 2 (1840) 513.
Platycorynus BALY, Descr. new gen. and spec. Phytoph. (1864) 2; MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 31; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 339.
Corynoeides CLARK, Ann. Mag. Nat. Hist. 86 15 (1865) 139–140.

Theumorus MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 35; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 339.
Eurycorynus MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 36; CHAPUIS in Lacordaire, Hist. Nat. Ins.; Gen. Col. 10 (1874) 340.
Omodon MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 44; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 340.
Erigenes MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 45; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 340.
Batycolpus MARSHALL, Proc. Linn. Soc. Zool. London 8 (1864) 46; CHAPUIS in Lacordaire, Hist. Nat. Ins.: Gen. Col. 10 (1874) 341.

Genotype: *Corynodes compressicornis* (Fabricius), Syst. Eleuth. 1 (1801) 491 (*Eumolpus*) from Guines [Designated by M. Jacoby, Fauna Brit. India, incl. Ceylon and Burma: Col. II, Chrysom. 1 (1908) 492].

Range: Ethiopian and Oriental Regions; Austro-Malayan Subregion.

General characters.—Body oblong-oval or oblong, sometimes more elongate with sides parallel at the median part, glabrous on the dorsum and more or less pubescent on the others, generally metallic in coloration and strongly lustrous.

Head deeply inserted in prothorax, generally invisible or hardly visible from above, more or less pubescent-punctate; frons convex, very deeply and broadly excavated on each side above the eye, with a central longitudinal impression or not; clypeus broad, either fused with frons and not separated from the latter or more or less distinctly delimited by some kinds of impression, with front margin more or less emarginate at the middle. Mouth-parts: labrum transverse-subquadrate, rounded and finely pubescent at the front margin, nearly flat or gently transversely convex on the dorsum, but of the anterior marginal area more or less bended downwardly and bears a row of some distinct pubescent-punctures nearly along the bended-area; mandibles very robust, strongly arched inwardly, pointed at the apex, hollowed at the inner face and lower margin of the face very strongly toothed on its midway maxillary palpi robust, with 1st segment much shorter and thinner than any one of the three succeedings, 2nd gently thickened terminally and rather arched, 3rd distinctly thickened terminally and generally shorter than either the 2nd or 4th, 4th thickest at a little beyond the base and thence thinned both extremities with apex truncated; labial palpi moderate in thickness, with 1st segment very much shorter and thinner than any one of the two followings, 2nd nearly cylindrical or rather thickened terminally and slightly arched, 3rd much longer than the 2nd, thickest at a little beyond the base

and thence thinned both extremities with apex truncated. Eyes small to moderate in size, shortly reniform in outline with inner margin somewhat emarginate, distinctly convex on the surface. Antennæ robust, about half the length of body, with terminal segments very thickly and finely pubescent, but the basal ones more sparsely so and all the segments mixed with some longer pubescence or setæ respectively; 1st segment very strongly incrassate, 2nd very much shorter than any one of the others, 3rd to 5th or 6th slender, 6th or 7th to 11th strongly dilated and flattened. Pronotum wider than long or the reverse, truncate-subconical or globose, usually narrowed in front viewed dorsally and in the actual measurement it is true in many cases, but sometimes narrower at the base than the anterior area; front margin almost straight, distinctly bordered and bears one or two large setigerous puncture on each extremity, front angles acute and more or less produced, lateral margins sharply ridged and either straight or rounded, basal angles distinct in general and bears a large setigerous puncture near each tip, sometimes these basal angles obtuse but with the tip usually acute, basal margin very broadly bordered with median part straight or gently arched posteriorly. Scutellum nearly obtrigonate or ob-pentagonal, partly more or less rounded on each side, either punctate or impunctate, sometimes depressed. Elytra elongate, wider than pronotum, narrowed and rounded at apex; dorsum strongly convex, strongly and thickly punctate, the punctures almost confusedly settled in some cases, but in other cases entirely or partly arranged in regular or irregular longitudinal rows which are single or paired, the basal area between the humeral callus and the scutellum often more or less convex and bounded behind by a transverse depression; humeri distinctly elevated and generally free from the base to near the apex, gradually narowed posteriorly and either impunctate or pubescent-punctate. Underside: prosternum rather broad, but distincly longer than wide, somewhat angulated laterally on each side near the middle, distinctly dilated laterally behind the coxæ, straight or rather emarginate at the hind margin, generally coarsely and rugosely pubescent-punctate on the surface; pro-episterna subtrigonate, coarsely and rugosely pubescent-punctate, with front margin distinctly arched forwardly; mesosternum subquadrate, rather longer than wide, somewhat constricted on each side, rounded at the hind margin, coarsely and rugosely pubescent-punctate on the surface; metasternum

strongly transversal, with a distinct central longitudinal suture, more or less pubescent-punctate on the surface; abdomen completely covered by elytra, thickly pubescent-punctate, truncate or slightly emarginate at the apical margin of last sternite. Legs robust, distinctly pubescent-punctate; femora fusiform, somewhat constricted near the apex, unarmed any projection on each underside; tibiæ gently thickened terminally, longitudinally sulcate and ridged, very strongly angularly expanded at the apical part, unarmed the spur; tarsi broad, with two basal segments nearly obtrigonate respectively, 3rd deeply bilobed, claw-segment rather clubate and somewhat curved; claws appendiculate or bifidate.

Sexual characters.—Male usually with the 1st tarsal segment of the two anterior pairs of legs strongly dilated and thickened and very much larger than those corresponding segments of the female; antennæ generally rather longer than those of the female, in some species, viz.—*Corynodes affinis* Chen from China —the terminal segments much longer than wide in the male, while about as long as wide in the female; in our *Corynodes sauteri* Chûjô, the distinct sexual differences may be seen in the structures of mandibles, last abdominal sternite and legs as described in the paragraph of that species; in *Corynodes micans* Chen from China, the female with two longitudinal ridges on each side behind the humeral callus, but the male of it without such a structure; in *Corynodes monstrosus* Baly from Pulo-Penang, *C. æneus* Baly from Borneo, *C. aureipennis* Baly from Pulo-Penang, and *C. tuberculatus* Baly from Borneo, the elytra of the female covered with a number of irregular tubercles, but the male of each never tuberculate.

Key to the species

1. Claws bifidate, elytra maculated ..... *undatus* (Olivier)
1'. Claws appendiculate, elytra not maculated ..... *sauteri* Chûjô

51. **CORYNODES UNDATUS (Olivier).** **Fig. 13.**

Cryptocephalus undatus OLIVIER, Encycl. Méth. 6 (1791) 614 (E. India).

Corynodes undatus GEMMINGER et HAROLD, Cat. Col. 11 (1874) 3398 (China); LEFÈVRE, Ann. Soc. Ent. France (6) 9 (1889) 294–295 (Indo-China: Pnomh-Penh in Cambodia and Mytho in Cochin-China); Nouv. Arch. Mus. Paris (3) 2 (1890) 197; JACOBY, Fauna Brit. India, incl. Ceylon and Burma, Col. II, Chrysom. 1 (1908) 493, *pl. ii, f. 12* (India, Burma, Siam, China, Malacca, and Pulo-Penang); CLAVAREAU in Junk et Schenkling, Col. Cat. 59 (1914) 165 (E. India, Burma, Siam, China, Cochin-China, Cambodia, and Malacca);

Doi, Dobutsugaku-Zasshi, Zool. Soc. Japan 479 **40** (1938) 374 (Formosa: Syoka-jyo; China: Rakuba-syu in Hongkong-Distr.); Miwa, Syst. Cat. Formosa Col. (1931) 188 (Formosa: Taihoku and Koshun; Hainan; China); Chen, Sinensia 5–6 **5** (1934) 488, 493–494, *ff. 7, 20* (Hainan, Hongkong, Indo-China, Burma, Siam, India, Malacca, and Pulo-Penang); l. c. 3 **6** (1935) 266, 268 (Hainan, Hongkong, Indo-China, Burma, Siam, India, Malacca, and Pulo-Penang); Ho in Wu, Cat. Ins. Sinensium **3** (1937) 826 (China: Hainan and Hongkong); Chûjô, Arb. Morph. Taxon. Ent. Berlin-Dahlem **1 5** (1938) 35 (Formosa: Taihanroku and Kankau in Koshun-Distr.).

Eumolpus bifasciatus Olivier, Ent. **6** (1808) 900, *pl. 5, f. 96; pl. i, f. 5* (no locality-name).

Corynodes bifasciatus Marshall, Proc. Linn. Soc. Zool. London **8** (1865) 34 (Siam); Baly, Trans. Ent. Soc. London **2 4** (1867) 130 (Malacca, Siam, China, and Pulo-Penang).

Eumolpus Gröndalii Swartz in Schönherr, Syn. Ins. **2 1** (1808) 235, nota 1 (China: Canton).

Corynodes flosculus Marshall, Proc. Linn. Soc. Zool. London **8** (1865) 37 (Indo-China: Cambodia).

Body oblong-oval. General color violaceous, bluish violaceous, violaceous blue, bluish, etc., partly greenish or bronzy in many cases, strongly lustrous; elytra from greenish to reddish cupreous, with lateral margins, a broad, transverse and sinuate band before the middle and a trigonal patch at apex similarly colored with general color, strongly lustrous, the transverse band widest at the sides where it extends downwards for a short distance and the anterior margin also slightly prolonged upwards in front of the shoulders, the apical patch occupies about one-fourth to one-third of the length of elytra; antennæ with seven basal segments metallic dark blue or greenish blue and lustrous, but four terminal segments violaceous black and rather opaque; mouth-parts dark yellowish brown to piceous or black, with mandibles and the most part of labrum always black, mandibles generally dark blue, violaceous blue, or greenish blue on each outer face at base, terminal segments of palpi often more or less tinged with metallic dark blue or greenish blue;

Fig. 13. *Corynodes undatus* (Olivier).

claws reddish brown to piceous, with the apex always more or less lighter than the base.

Var. A. Elytra greenish æneous, marked as in the type.

Var. B. Elytra with the anterior transversal band not produced posteriorly, its hinder border straight but anteriorly extending upwards to the base, entirely covering the shoulders.

Var. C. Elytra with the anterior transversal band smaller and irregularly cruciform.

Head deeply inserted in prothorax, invisible or hardly visible from above, coarsely and thickly pubescent-punctate and interspaces of these punctures microscopically finely punctulate, very deeply sulcate on each side of frons and the sulci very strongly widened posteriorly, nearly impunctate in these sulci; frons distinctly convex, with a central longitudinal impression which is widened anteriorly; clypeus separated from frons by a deep transversal excavation which is interrupted at middle by a longitudinal ridge, more weakly and thickly punctate on the surface than on the frons, gently emarginate at the middle of front margin and rounded on each side of the emargination. Antennæ rather longer or shorter than half the length of body, the basal segments rather sparsely but the terminal ones very thickly pubescent and all of them very sparsely intermixed with longer setæ; 1st segment strongly thickened and somewhat emarginate at each outer face, 2nd very much shorter than any one of the others and nearly truncate-obconical, the nine followings flat, 3rd nearly equal in width to the 2nd at its preapical part but rather narrower at the others, 4th and 5th rather distinctly widened terminally, 6th more distinctly widened terminally than in the 5th, 1st and 3rd to 6th subequal in length to each other, from the base of 7th the segments gradually widened terminally, all of them much wider than any one of the six basal segments, 7th to 10th nearly obpentagonal in each, 7th and 8th always longer than wide, 9th and 10th not longer, or rather longer, than wide, 11th nearly pentagonal and not sharply pointed at the apex. Pronotum nearly truncate-conical viewed dorsally, somewhat wider than long; front margin distinctly bordered and bears small pubescent-punctures, front corners strongly produced anteriorly and bears two large punctures, which are including a long seta in each, on each lateral end of the front margin, lateral margins sharply ridged and nearly straightly convergent to both extremities from the middle, basal angles distinct and bears a large setigerous punc-

ture on each, basal margin distinctly bordered and gently arched posteriorly; dorsum very strongly convex, microscopically finely punctulate throughout and the punctures various in size, very deeply and irregularly settled the large punctures besides the former microscopical ones. Scutellum nearly obtrigonate, with lateral margins rounded; dorsum more or less depressed on the middle and also at the apex, microscopically very finely punctulate, with a few larger punctures in the basal depression. Elytra much longer than wide, rather wider than pronotum, narrowed and rounded at the apex; dorsum strongly convex, entirely covered by two kinds (larger and finer) of microscopically fine punctures, strongly punctured inclosely approximate longitudinal rows, the punctures more or less smaller than those on the pronotum, rather more finely so posteriorly, with a weak transverse depression behind the basilar area; humeri somewhat convex and almost free from the large striated punctures. Underside: prosternum much longer than wide, angulated laterally on each side at middle, strongly dilated laterally behind the coxæ, gently emarginate at the hind margin, very strongly, thickly and rugosely pubescent-punctate on the surface; pro-episterna pubescent-punctate as on the prosternum, with front margin very strongly arched forwardly, mesosternum pubescent-punctate as on the prosternum metasternum rather finely and more sparsely pubescent-punctate; abdomen very strongly and thickly pubescent-punctate, with apical margin of the last sternite slightly truncated; legs distinctly pubescent-punctate, with claws bifidate.

Male.—Antennæ rather longer than half the length of body, 1st tarsal segment of the two anterior pairs of legs rather wider than those corresponding segments of the female.

Female.—Antennæ rather shorter than half the length of body.

Length.—♂, 8.0 to 10.5 mm; ♀, 10.0 to 12.0 mm.

Local distribution.—Taihoku-Si, Taihoku-Syû (1♀, August 3, 1932, M. Chûjô leg.); Kuaru, Kôsyun-Gun. Takao-Syû (1♀, March 29, 1935; 2♂♂ and 2♀♀, June 12, 1937, 1♂, June 14, 1937, M. Chûjô leg.).

Syoka-zyo (after K. Doi, 1928); Taihoku and Koshun (after Y. Miwa, 1931); Taihanroku and Kankau in Koshun-Distr. (after M. Chûjô, 1938).

General distribution.—India, Burma, Siam, Pulo-Penang, Malacca, Indo-China, S. China, Hainan, and Formosa.

60744——12

52. CORYNODES SAUTERI Chûjô. **Fig. 14.**

Corynodes sauteri CHÛJÔ, Arb. Morph. Taxon, Ent. Berlin-Dahlem 1 5 (1938) 34–35 (Formosa: Koshun, Kankau in Koshun-Distr., Kusukusu, Noko, Hinokiyama, and Kuraru).

Body elongate, oblong-oval. General color metallic green or blue-green and in many cases tinged with violaceous or purplish colorations in various degrees, moreover the dorsum more or less with a brassy or golden shimmer; mouth-parts yellowish brown to piceous in the ground color, but the median area of pronotum, latero-basal areas of mandibles and palpi (excepted the one or two basal segments) more or less tinged with metallic green, blue-green or bronzy; antennæ with six basal segments similarly colored with general coloration, but the five terminal segments violaceous or violaceous blue; claws piceous, with apical part lighter; in the type specimens the elytra golden or brassy red and narrowly bordered with the general color, but in the other specimens newly carried before me the red coloration with a strong tendency to reduce and in the end the coloration almost or completely represented by the general color.

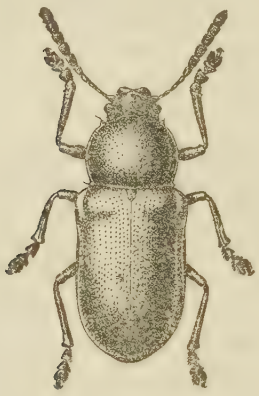


FIG. 14. *Corynodes sauteri* Chûjô.

Head deeply inserted in prothorax invisible from above, distinctly and sparsely pubescent-punctate, interspaces of these punctures very finely punctulate under a strong lens; frons convex, deeply sulcate on each side as usual, with a depression, which generally includes a longitudinal impressed-line in the bottom, on the middle; clypeus distinctly or obtusely separated from frons by a transverse depression which touches to the anterior end of the central longitudinal depression of frons and forms a ⊥-shape depression with it, more thickly punctured on the surface which is flat or rather depressed, lightly emarginate at the middle of front margin and distinctly rounded on each side of the emargination. Antennæ rather longer or shorter than half the length of body, the basal segments rather sparsely and the terminal ones very thickly clothed with fine pubescence and moreover all the segments clothed with some longer setæ respectively; 1st segment very strongly thickened

and somewhat emarginate at the outer face, 2nd extremely shorter than any one of the others and nearly truncate-conical, the nine terminal segments flattened, 3rd to 6th subequal in length to each other, 3rd nearly equal in width to the 2nd and gently widened from the base to a little before the apex and thence narrowed to the tip, 4th to 6th distinctly and respectively thickened terminally, 4th much wider than the 3rd, 5th slightly wider than the 4th but narrower than the 6th and slightly longer than each one of these two latters, 6th very much narrower than the 7th, 7th to 10th strongly widened, nearly obtrapezoidal and gradually diminishing the length but increasing the width terminally, 7th distinctly longer than wide, 8th to 10th not distinctly longer than wide and often rather shorter than wide, 11th subpentagonal with the apex bluntly pointed. Pronotum somewhat wider than long, strongly rounded on each side; front margin distinctly bordered, but the border narrowed medially, front angles prominent and bears a setigerous puncture on each and another similar puncture on a little inside of the former one, lateral margins sharply ridged, basal angles nearly 90° in angulation and bears a setigerous puncture on each apex, basal margin broadly bordered and gently arched posteriorly at the median part; dorsum very strongly convex, with latero-anterior corners very strongly deflexed and invisible from above, strongly and rather sparsely punctate and interspaces of these punctures finely but not thickly punctulate. Scutellum nearly obtrigonate with latero-posterior angles rounded, slightly convex on the surface and very finely but not very thickly punctulate under a high power lens. Elytra elongate, wider than pronotum, narrowed and rounded at the apex, apical end of the sutural area more or less prominent posteriorly in many cases; dorsum strongly convex, strongly and rather thickly punctured, the punctures partially arranged in longitudinal rows, interspaces of these punctures very finely but sparsely punctulate under a strong lens, with basilar area separately lightly convex bounded behind by a transverse depression and deliminated from humeral callus by a longitudinal impression, latero-marginal areas distinctly reflexed, humeral calli distinctly longitudinally elevated. Underside and legs finely shagreened, thickly pubescent-punctate; prosternum longer than wide, subparallel-sided and angulated outwardly at the middle, strongly dilated laterally behind the coxæ, angulated posteriorly on each side of the middle of hind margin, coarsely and rugosely punctate on the

surface which is uneven; pro-episterna rugosely punctate, with the front margin strongly and gently sinuously arched forwardly; claws appendiculate.

Male.—Antennæ rather longer than half the length of body, mandibles strongly angularly expanded at each outer corner, last abdominal sternite with a distinct longitudinal impression on the middle, fore-legs especially thickened and elongate, 1st tarsal segment of the fore- and middle-legs very strongly dilated and much wider and thicker than those corresponding segments of the female.

Female.—Antennæ rather shorter than half the length of body last abdominal sternite with an impunctate and even or rather uneven area on the middle.

Length.—♂, 8.0 to 9.0 mm; ♀, 9.0 to 11.0 mm.

Local distribution.—Kuaru, Kôsyun-Gun, Tokao-Syû (1 ♂, June 11, 1937, M. Chûjô leg.; 2 ♀ ♀, April 5, 1940, R. Matuda leg.); Kusukusu, Kôsyun-Gun, Takao-Syû (2 ♂ ♂ and 1 ♀, June 17, 1937, M. Cûjô leg.); Takeya, near Hori, Nôkô-Gun, Taityû-Syû (2 ♂ ♂ & 1 ♀, July 8, 1940, M. Chûjô leg.); Mt. Hiturokuzan, Karen-Gun, Karinkô-Tyô (1 ♀, August 14, 1940, M. Chùjô leg.); Kahodai in Mt. Hassen-zan, Taityû-Syû (1 ♀, June 7, 1941, T. Mitono leg.; 1 ♂, June 3, 1942, A. Mutuura leg.).

Koshun, Kankau in Koshun-Distr., Kusukusu, Noko, Hinokiyama and Kuraru (after M. Chûjô, 1938).

General distribution.—Formosa.

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PUBLICATIONS AVAILABLE

CONTENTS AND INDEX. THE PHILIPPINE JOURNAL OF SCIENCE, vol. 1 (1906) to vol. 10 (1915). Bureau of Science Publication No. 8 (1917). Paper, 442 pages. Price, $4.00 United States currency, postage extra.

SECOND TEN-YEAR INDEX. THE PHILIPPINE JOURNAL OF SCIENCE, vol. 11 (1916) to vol. 28 (1925). Compiled by Winifred I. Kelley. Bureau of Science Monograph 26. Paper, 382 pages. Price, $4.00 United States currency, postage extra.

CHECKLIST OF THE ANTS (HYMENOPTERA: FORMICIDÆ) OF ASIA. By J. W. Chapman and S. R. Capco. Institute of Science and Technology Monograph 1 (1951) new series. Paper, 327 pages. Price, $2.00 United States currency, postage extra.

NOTES ON PHILIPPINE MOSQUITOES, XVI. GENUS TRIPTEROIDES. By F. E. Baisas and Adela Ubaldo-Pagayon. Institute of Science and Technology Monograph 2 (1952) new series. Paper, 198 pages; with 23 plates and 4 text figures. Price, $2.50 United States currency, postage extra.

A REVISION OF THE INDO-MALAYAN FRESH-WATER FISH GENUS RASBORA. By Martin R. Brittan. Institute of Science and Technology Monograph 3 (1953) new series. Paper, 224 pages, with 3 plates and 52 text figures. Price, $2.50 United States currency, postage extra.

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